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EDITORIALS.

EUTHANASIA.

It may be recalled how in a dreadful railway accident a man crushed under the engine implored that he be killed in order for the ending of his agony. A surgeon mercifully passed chloroform to him so that by breathing it his sufferings could be alleviated. He died, in all likelihood not of the chloroform, but of his injuries. About that time "Brother" Gillette of the Shaker Colony at Ashton, Florida, was imprisoned on the charge of "assisting out of this life "Sister" Marchant, and he was freed because the grand jury would not indict either him or "Sister" Sears, who admitted with him, that they had chloroformed Sister Marchant. They maintained that they had a moral right to do this by reason of the great physical suffering of the aged Sister Marchant. "So pitifully did she plead, and so great appeared her agony" that this "brother and sister," after conferring with others of the Shaker Colony, decided to "help her." Two ounces of chloroform were poured on a cloth, the aged woman gave the signal that she was ready, and then she allowed the cloth to be spread over her face. Many people defended this euthanasia.

Maurice Maeterlinck, a very profound and moving writer, has in his book, "Death," reopened this most pregnant question of euthanasia. He declares that all our knowledge helps us to die in greater pain than the animals that know nothing. As science progresses it but makes for a prolongation of the agony of death—the most dreadful and the sharpest peak of human pain and horror, at least for the witnesses. "All the doctors consider it their first duty to protract as long as possible even the most excruciating convulsions. Who has not, at a bedside, twenty times wished to throw himself at their feet and implore them to show mercy. "The prejudice (believes Maeterlinck) against the arbitrary induction of a painless and premature death will one day be regarded as barbarian, as "a relic of the times when humanity was convinced that any known torture was preferable to those awaiting us in the unknown;" and he predicts that a day will come when science will no longer hesitate to shorten human misfortunes; "when life, grown wiser, will depart silently to its hour, knowing that it has reached its term, even as it withdraws every evening as we sleep, knowing that its day's task is done."

Now, Maeterlinck writes like a poet and a mystic; it is very probable, indeed, that he knows nothing or very little, indeed, of the practical aspects of suffering, such as physicians have every hour to deal with—else he would surely not urge such dreadful responsibilities upon physicians as he does in his fascinating book, nor is he in his writing quite accurate. To relieve pain is the first thing a practitioner will do; and to the extent, at least, that the life of the patient

will not be jeopardized by the amount of the anodyne. And this the physician is ever eager to do: first, because there is nothing so killing as pain nor anything so destructive of the patient's vitality; and secondly, because there is nothing so distressing to the on-looker as a fellow mortal suffering excruciating torture.

Nor are physicians hardened men; there is no class of men more genuinely sympathetic. None but a compassionate physician can maintain a practice; because nobody wants to engage any other kind of a man. The span of the physician's life averages shorter than that in most other callings; and this, undoubtedly, because the sufferings of their fellows takes so much out of them; and it is not essential even to prolong any convulsions; and there would never be the slightest occasion for anyone to implore the physician (with or without genuflexion) to alleviate sufferings.

A most vital consideration (and one which always proves conclusive in sane discussions of the euthanasia question) is that neither the physician nor any other mortal can ever be sure of an infallible prediction of a fatal issue in any case. People that have suffered from seemingly irremediable illnesses have nevertheless lived to make physicians wish with all their hearts they had not been as positive in their untoward prognoses. To err in such predictions is human; and physicians are of all creatures the most human, as they are the most humane: only divinity can foretell unerringly the hour, the day or the year of anyone's death. Indeed, a woman who a year ago was begging for euthanasia has since left the hospital ward, and is glad she is alive.

What mortal, then, has any right to hasten any death upon his finite assumption of its inevitableness. Consider what a weed-choked field of evil possibilities would be cultivated were the opinions expressed so alluringly by Maeterlinck to prevail; were physicians, upon the plausible pleadings of heirs or other interested people, to assure the helpless sufferer "a gentle and easy death" before his appointed time. It is for such reasons as these that physicians must ever be on the negative side of the euthanasia question.

THE PHYSICIAN AS SPEAKER.

Every physician comes upon interesting data which would be most useful to his colleagues should he choose to make them known. Excellent opportunity for doing this is provided in medical meetings—as in those of societies which are held periodically in small halls or in the parlors of public libraries, or in the homes of members. Yet how frequently is the following experience reduplicated: In a meeting of some thirty practitioners a well-prepared paper on a subject about which every doctor knows something was read, yet when the presiding officer called for discussion there followed a silence such as can normally obtain only in Polar wastes and a gloom such as must have environed that craft which Charon is fabled to have piloted across the Styx. In a most praiseworthy effort to break this solemn silence and to dispel this gloom the president then called upon each physician in turn. The first seemed to duck as if he were fending off a blow, and then responded with a sickly grin and that hoary sentiment about the writer having so fully covered his subject, he (the hearer) had nothing he could add. And so on seriatim down the line. Is not all this, indeed, a sorry compliment, and poor thanks for his labor, to a colleague who had gone down deep into his experiences, and who had given hours of research to the preparation of a real addition to the profession's thesaurus? It is the physician's duty to add what he can in the discussion of such papers.

Again, there are now many lay assemblages in which matters of the communal health are ventilated; it is oftentimes diffi-

cult to get medical men to take part in these meetings. Yet here is a physician's duty, as apart from his private practice; especially by reason that he knows more about the subjects under discussion than any other individual in the body politic, although we have known some laymen to think otherwise.

And these evasions are generally from no other cause than a timidity—which sometimes amounts even to terror—at the idea of "getting up in meeting" and saying something to the point; it has been well observed that no man, shipwrecked on a desert island, without so much as a cannibal for company, is so utterly alone as one at a public function during the first few moments that he gets on his feet. It is in the hope of dispelling such diffidence that the following suggestion is respectfully offered those colleagues unaccustomed to speaking.

Public speaking is not to-day in the oratorical style which Webster made so famous; that which now generally obtains is in the colloquial, the conversational style. He who can speak distinctly, agreeably and coherently at a dinner table or in a sitting-room is qualified to address an assembly of ordinary proportions. All he needs is the courage he ordinarily evinces in his every-day affairs; having this he shall certainly triumph and not fail. It is apropos by way of "innocent merriment" and intending no disrespect to any creature, human or otherwise, to quote Carlysle:

"The speaker is as the ass whom you took and cast headlong into the waters. The water at first threatens to swallow him, but he finds to his astonishment that he can swim therein, that it is buoyant and bears him along. One sole condition is indispensable—audacity, vulgarly called impudence. Our donkey must commit himself to his water element, in free daring strike forth his four limbs from him. Then shall he not drown and sink, but shoot gloriously forth and swim, to the admiration of the bystanders. The ass, safely landed on the other bank, shakes his rough hide, wonder-struck himself at the faculty there is in him, and waves joyfully his long ears. So, too, the speaker."

The physician who is called upon to make a brief address in public will be armed at all points if he will beforehand make a sensible and harmonious arrangement of the various parts of his subject; and if he will then jot down in logical order the section or paragraph headings he cannot go amiss when he stands before his auditors.

If he have beforehand clearly thought out his address, he will be an adequately good (though, perhaps, not a great) speaker; for "our voice is where we are thinking." Of course, one may read his discourse, but this is never so effective or so inspiring as speaking straightforwardly. A heavy meal should not be taken before the occasion; wines have been known to befuddle the intellect to a disastrous degree; a cup of good tea is an excellent incentive to reasonable speaking; and a nap of half an hour before the meal (that is to precede the speaking) will wonderfully clarify the brain.

Gestures may be left altogether to take care of themselves; for the earnest speaker (and he who is not sincere had best not venture to address an audience) will subconsciously gesticulate in conformity with his ideas. And if one is to speak half an hour or more an anecdote or two will never be amiss, if the story comes in pat with the subject matter.

THE TUBERCULOSIS SANATORIUM.

When I bought the first land on which the Adirondack Cottage Sanatorium is built I paid $25 an acre for it; but the price was then thought absurdly high. My last purchase of five acres cost me $5,000. To my knowledge there has never been an employee who came to the sanatorium in sound health who developed tuberculosis while there, and a sanatorium can no more endanger the health of the neighborhood in which it is built, even if the residences are at its very gates, than it could if it were placed on top of a high mountain, miles away from habitation."—*Dr. Edward L. Trudean.*

WINGED DISEASE CARRIERS.

"You may have noticed how the flea
Has other fleas that on him prey;
And these have others still to bite 'em;
And so proceed *ad infinitum.*"

THIS stanza was evolved out of the sardonic temperament of Dean Swift, long before there was any science of microscopic parasitism such as Pasteur and Koch founded. Possibly the Dean noticed (as have others since his time, ourselves included) a maddened blue-bottle darting frantically about, tiny mites fastened upon its body, and eventually, no doubt, destroying it. Anyway, the Dean's discernment of the infinitesimal degree to which the phenomenon obtains was remarkable; though probably not altogether intuitive as we shall see.

It is certainly a gruesome commonplace of existence—that any given creature can maintain itself only by living, one way or another, on some other creature. Beginning with ourselves, the highest developed, each kills and preys upon the successively less resistent life down to the end of the sentient scale. We humans, the more we have progressed in civilization, like to ignore all this; the most of us put it comfortably behind us by getting our fellow in the abbatoir to attend to the unpleasant part of it; when we breakfast on that dainty little lamb chop we quite successfully consign to oblivion, the fact of slaughter with relation to it. But the biologic truth holds all the same.

On the other hand bacteriology has revealed a veritable cosmos *in parva,* teeming with organisms which can exist only by parasitism upon, and much too often by destruction of, such life forms as are ordinarily visible. Most human life is destroyed, not by tangible entities—such as wild beasts or wars or violence or gross calamities—but by infection, by the agency of disease-engendering germs or fungi, in size microscopic, or indeed ultramicroscopic (that is, beyond the almost infinite detecting power of the microscope, as at present perfected), we only know of their existence by the evidence of their living in, and feeding upon, and by their oftentimes killing of the bodies of their hosts. These germs we speak of as bacilli, or cocci, or spirilli, or bacteria, or fungi, or protozoa, or viruses.

Then, between the microscopic life on the one hand and the microscopic on the other, are creatures which make it a large part of their business to bring the two extremes into relation, congenial at least to the latter; it is these intermediaries, which are for the most part not themselves disease-breeders, but are rather infection-carriers, that we are to deal with. And they are certain insects, mostly domestic, and the most virulent foes to humankind that can be imagined

And how do these insects play their insidious, though probably not malevolent roles: (1) The germs may stick to their hairy legs and spongy bodies; or (2) the germs may be eaten by them and deposited upon human food and drink with their excreta (as in fly specks); or (3) the insects may eject germs from their mouths; or (4) the insects may die (no doubt from the germs they have absorbed, or from the poisons (toxins) evolved by the germs), and then the insects will dry up, crumble, be distributed as dust, and be either breathed in or swallowed by human beings; or (5) biting or stinging insects may inject into the host disease-laden blood which they have previously sucked from a human being or an animal already infected and sick with the given disease. The first four forms may be considered mechanical modes of transmission; the last (5) biologic, because the germ (as for example, the plasmodium of malaria) undergoes a life cycle in the body of the mosquito before that insect transfers the infection by injecting the plasmodium when it bites.

TOWN AND COUNTRY.

THERE has probably never been a time when the God-made country has not proved healthier than the man-made city. And yet more people die to-day of typhoid fever, malaria, influenza, dysentery, apoplexy, paralysis and heart disease in the country. Of these apoplexy, paralysis (which generally results from a "stroke"), and heart disease (generally associated with rheumatism), are "terminal affections"; that is, they are diseases of which people are reported—and correctly—in the burial certificates to have died, although there have been in almost every such case some antecedent disease or diseases suffered.

It is never wise to prophesy unless you know; all the same, it is a fairly safe prophesy that our children grown to maturity, certainly our grandchildren, will experience typhoid fever and malaria not at all. For, besides all the other preventive measures that will be practised against this disease, they will be vaccinated against typhoid as against smallpox. And the malaria mosquito is going to be banished from civilization, as soon as our people appreciate how easily the thing can be done, and at what little expense by comparison with the cost in means and suffering malaria occasions.

The diseases most rife in the city are cancer, alcoholism (though John Barleycorn has plenty of intimates in the country too), meningitis, bronchitis, the pneumonias, diarrhœa and enteritis, cirrhosis of the liver, appendicitis, Bright's disease and nephritis, and people die more in the city from violence.

And yet the cities have made amazing strides in sanitation since that pig sty period of which Dickens so potently complained, and with such good results that London's death rates now average one-half what they were in that most humane novelist's time. The simple truth is that urban health authorities have made far the greater application of the demonstrated principles of that Herculean babe in the family of the sciences—preventive medicine. To-day a hundred people exist in good health on a city plot where formerly ten people lived in constant peril of disease. Thus, since 1904 urban death rates in New York State have already decreased, whilst rural death rates have increased, until the metropolis has under-rated rural up-State; 13.7 per 1,000 of population as against 15.4. The difference is considered to be mainly due to the greater rural prevalence of typhoid and tuberculosis (against which latter disease civic ordinances have not only been made but also consistently enforced). And if you put a monetary value on human life —say $5,000 the individual, rural New York has most needlessly wasted in 1913 a matter of fifteen millions of dollars.

Strictly speaking the comparison just made is uniform to the country, with regard to tuberculosis any way; because the treatment of city consumptives is to send them to rural sanatoria, where many of them die, thus swelling the country death rate. At the same time their deaths are eliminated from the civic mortality tables, where they of right belong.

Still, after all allowances are made, the country districts are wofully behind cities in the application of modern sanitary principles. And that is why a division of Rural Hygiene is contemplated in the Health Department of the Empire State, which ought to have the backing for all it is worth and to the limit by every ruralite. The idea, for that matter, is worthy of emulation throughout the Federal Union.

"This towel is disgraceful," declared the drummer at the mining camp hotel. "Boss," said the colored porter, "seventy-five men done wiped dey han's on dat towel dis mawnin, an' you is de first to complain!"—*Denver News.*

THE TONGUE IN DISEASE.

For examination the tongue should be protruded as far as possible, and the whole surface should be inspected. An abnormal appearance points (1) to fevers, (2) to local lesions, (3) to some disorder in the digestive tract, or (4) to various morbid conditions not included in the first three divisions.

1. In fevers the tongue is generally coated or furred, dry, sometimes fissued, and is apt to look dirty and the mouth to be bad smelling. In typhoid, when a brown, furred tongue becomes darker and thicker, and sordes appear on the teeth and lips, the conditions is serious. When the tongue begins to "clear up" we expect convalescence; when the coating re-forms, we fear a relapse. The tongue is tremendous in several fevers, where there is extreme exhaustion. Occasionally there is an abnormally red tongue, due to denuding of the epithelium; this appearance may at times be detected beneath the coating.

2. A coated tongue may be caused by decayed teeth, or enlarged tonsils or excessive smoking. Other local manifestations are the mucous patches of syphilis, which especially in children, must not be confounded with the patches of stomatitis. Chancre may be found, or there may be circumscribed swelling and hardness, which would mean either syphilis or cancer, to establish the diagnosis between which it may be necessary to cut out a piece for microscopic examination. Depressed scars upon the surface would indicate healed specific ulcers. We may find in epileptics scars due to biting the tongue. Finally the tongue may be stained by drugs, or acids or alkalies.

3. A furred or coated tongue occurs in disorders of the digestive tract. Constipation produces this; or a brown furred tongue with a bad taste may appear the "morning after" the patient has wined and dined generously. A coated tongue with a yellowish hue would draw attention to the liver. When the tongue looks raw, like beeksteak and of an unnaturally clean, smoothe and perhaps glazed appearance, it points to gastric or intestinal irritability; this means shedding of intentinal epithelium with consequent loss of power of absorption—a serious condition, for here the supply of nutritive material to the system is interfered with.

4. The color of the tongue is affected by that of the blood: thus, a pale, flabby indented tongue, indicates thin and poor blood, as in anæmia and chronic wasting diseases. It is said that a swollen and indented tongue, presenting also a sort of silvery sheen, suggests menorrhagia. The tongue is dry in diabetes and in other conditions where the bulk of urine is large. It is tremulous in chronic alcoholism, in many nervous diseases, and in aeld and mercuria poisoning. A tongue looking as if covered with white paint is characteristic of malaria. The "strawberry tongue" of scarlet bright red, with papillæ prominent.

THE SURGEON'S HAND—"HE MAKETH THE BLIND TO SEE."

Mary Murdock Mason, in the Century.

Beneath his wrist there stirs a sun-god's thought,
A strong magnetic current swiftly flows
Through palm and finger-tip, and power bestows
On tiny blade of steel with promise fraught.
Up toward the eye the charged blade is brought.
Marble, moonlit, the arched corner shows,
The iris, lying lakelike in repose,
And the deep pupil where the soul is caught.

"Let there be light," he says—"Let there be light."
And, solemn as the sign of the cross, the hand
Performs the miracle. At that command
The pulsing thought leaps toward the blind man's night.
Symbolic, like a dove's flight to its nest,
The haloed hand drops down and is at rest.

ORIGINAL ARTICLES.

THE CONSERVATION OF SIGHT AND HEARING.*

By Percy Fridenberg, M. D., New York.

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Conservation of resources, of which we hear so much, deals with material things or at best with sources of power, and has mainly an economic bearing on the future. Conservation of human life and health and, —not the least important,—of eyes and ears has, as I will show, a great economis significance and far and away beyond this a vital and prophetic significance for the race and generations to come. To explain this I must go back and ask what uses are served by the eye and vision. It is not only to earn our daily bread that we need sight, but indeed to save ourselves from a hundred and one dangers not only of dramatic accidents, but of every day mistakes, slips, confusions and errors. To anyone who has tried to untie a knot in the dark, the importance of keen sight in a thousand things, big and little, will suggest itself at once. Locomotion, on which so much of modern life depends cannot be safe, rapid, or accurate without good vision. The man who cannot see, cannot walk in security; the man who has poor eyes cannot drive others in wagon, trolley, or train, in safety. In our crowded streets and rushing times, sharp eyes and ears, too, are needed to keep us from accidents which means injury and possible death. Slight defects of vision may be the cause of various accidents, at which I have hinted above; thus, to cite a few examples, confusing drugs, chemicals, or poisonous substances with harmless ones through misreading labels or not seeing just what they are; burning face, hair, or hands through getting too near flame, fire or stove in endeavor to see in spite of near-sightedness; mistakes of prescriptions by druggists, of instructions by nurses, of train-orders by engineers, on account of defective sight, and a 3 that looked like an 8. So that, for the life of us, it is well worth while to preserve sight and ears. Now as to what we call the economic or money value meaning of vision: At the beginning of life almost it becomes evident that good sight is an asset, poor sight a financial handicap. In no occupation is there a premium on not seeing and the higher the trade or profession, the greater the demands on sight, either in conjunction with the training of the hand as in expert manual work, skilled trades, navigation, transportation, manufacture, and so on, or in the requirement of prolonged reading, writing and use of instruments of precision (optical) in the acquisition of a scientific education. The child with weak eyes is at a disadvantage from the start in acquiring the bricks and mortar of modern educational structure, reading. The child whose eyes are healthy and strong, and can stand the strain of school—and home work without headaches, nervousness, strains of all sorts, will, other things being equal, have the best chance for advancing, not only in school, but in life. Later on, we find that even slight defects of sight affect the earning power of the individual, and this in more than one way. First, by increasing the danger of his being injured accidentally in some one of the numerous ways possible under modern conditions of factory life, and, secondly, by making his work and hence the product less rapid, efficient and reliable. There are various standards of vision for various trades, and the earning power of sight, if I may so term it, has been figured very carefully, not only by the doctors, however, but by the insurance adjusters and claim agents as well. Not only the loss of both eyes or of one, but minor affections, are scheduled as to their damage to the individual and their influence on his earning capacity. Aside from the partial or complete loss of earning power, there are numerous other items of economic loss, such as the time and effort of waiting on and helping the blind, or even of supporting them, the money spent for medicines, nursing, physicians, and so on, in the treatment of eye disease or injury which may have been quite preventable, as we shall see. Multiply the loss which you can plainly see is involved in the case of one child, by the

* A lecture delivered, February 25th, 1914, under the auspices of the Social Service Department of Lebanon Hospital, New York.

number which, statistics tell us, is the average throughout the country, multiply this by the years of blindness during which the individual may be not only a dead loss but a financial burden as well on family and indirectly but no less really on the community, and you will realize why prophylaxis, or preventive medical science is one of the most practical with which we can deal. It is strange that the medical side of this wide subject of efficiency was almost the last to appeal to professional or lay-men. Long ago, capital recognized the importance and profit of efficiency in its living machinery. It was followed out into the minutest detail. The saving of a motion of the hand, the quickening of a twist of a finger, meant pennies an hour or dollars a day. And if these things mean something to the employer why should they mean less to us, the people. So much for the hard, practical, side of the value of vision, but there is another wider and higher thing we must not overlook. I can indicate it best by asking the question "How much would you take to be blind?" You could not be bought, could you, even at the exchange of being cared for in idleness for all your days. It is not only to live and to work that we need our eyes and ears, but to see the things and beings we love, whom we need and who need us. We cannot put a value, a price mark, on the sunset or the ocean, the smile of a child or the glance from the eye of a lover, because these things are beyond the reach of the wealthiest,—cannot be bought. We know how much they are worth by what we would be willing to give for them when we have lost them. So that I need not go further into the need for or the justification of conserving vision and hearing. I need only add that as we are dealing with organs and organisms, that is living things which perpetuate themselves with all their defects, rather than with machines which are limited by themselves, we shall have to consider not only the present but the future, not only the one man or woman, but those who are to come after. The fact that many diseases or weaknesses of the eyes, and particularly the preventable ones, are communicable, and others capable of being inherited and so involving a whole chain of descendants, brings this question into the field of what we call eugenics, the relation of the community to a healthy generation to come. Now a healthy generation to come must first of all have healthy mothers and fathers, and our first care is of those about us. It has been said that in bringing up a child you must begin with the training of its grandfather. This is neither as fanciful nor as impracticable as it might seem, for the children of to-day are to be parents, and grandparents, we hope, and what we can do for their health and strength will be handed on indefinitely, just as their defects and preventable disabilities will persist to weaken and handicap another age of human beings. "The child is father to the man," in matters of health as in so many others.

Methods of Conservation of Sight and Hearing.

First, remember that the general health is of vital importance and practical bearing. Good nourishment, fresh air, sunshine, exercise, will not only tend to develop eyes and ears as they should be developed, but help the child to throw off, perhaps, contagion which often affects the eyes and ears seriously. Many of the most serious affections of the eye and some which often end in blindness are caused by the entrance into the blood-current and final lodging in the tissues of the eye of the germs of consumption, grippe, pneumonia, and blood-diseases of various kinds. The "catching" diseases or eruptive fevers, such as measles, chicken-pox, whooping cough, of the less serious; scarlet fever, diphtheria, of the more serious, are almost always associated with or followed by inflammations of the eye and ear. Prevention of contagion due to these diseases and to grippe, would wipe out perhaps one quarter of all eye disease in children. It has been found that the greater part of these diseases are caught by breathing, that is, the germs enter by the mouth and nose, and then develop and multiply. This is why snuffles and sore throat so often precede "catching" diseases, and probably rheumatism. Now, any condition of the nose or throat which interferes with free deep breathing, and anything tending to keep up irritation or inflammation in these parts favors the breeding of germs and predisposes to disease. The air, normally, is warmed, moistened and filtered in passing through the nose. When the nose is stuffy the mouth is opened for breathing, and the air stream passes through rapidly and in too large a volume to be treated as before. It is cold, dry, and unfiltered. The germs it contains are deposited on the throat, tonsils and upper breathing passages and easily cause trouble. So normal breathing of clean air is an important preventive, in a roundabout way, of eye and ear disease. There

is a more direct path, in regard to ears, however. It has been found that frequent colds "in the head," that is *in the nose*, even when not followed by contagious disease, and any long standing nose affection which blocks this passage with slime or matter, gradually destroys hearing and produces a slowly progressive and almost incurable deafness. So prevention of colds is another item in the preservation of sight and hearing. Prevention of colds, however, means natural deep breathing; it means the treatment by competent physicians of any condition which interferes with this function. "Shut your mouth and save your life" was the way a well known physician, Catlin, put it, over a half century ago, and there is a good deal of truth in the maxim. The habit of deep breathing, through the nose can be assisted by sports and exercises and by baths. The earlier in childhood it is established, the better for the general health and the resistance of that child. Susceptibility to contagion, repeated attacks of colds, sore-throats, tonsilitis, and the eruptive fevers, always mean abnormal noses and throats requiring special attention. Besides prevention it is well to bear in mind that early treatment of each and every one of these diseases is another important factor in preserving eyes and ears, as the affections of the latter organs generally do not develop until the disease has been active for some time. Then the quarantining, separation or isolation of children with communicable disease is a means of preventing many sore eyes and running ears. This may be obvious and should be a matter of course, but, unfortunately, there are many communities in which this necessary precaution is opposed through superstition, neglected through carelessness or ignorance, or not carried out because it means spending a little time and trouble and perhaps, money.

Local conditions. In regard to the eye, many affections which interfere with sight can be put in two classes, infections and injuries, both accidental and to some extent preventable. Accidents will happen, of course, but less often if we take care than if we take chances and no precautions. Most eye infections come from without; they are brought into contact with the delicate surface of the eye by dirty hands, soiled towels or handkerchiefs, by dust blowing into the eyes from filthy streets, or,—and this not so rarely,—by dirty solutions used as eye-drops or eye-washes. So we speak of air-borne and of contact infection. The latter is most common. We can guard against air-borne contagion but little, except, perhaps, by washing out the eyes with boiled water or boric acid solution, after they have been exposed to dust or other "foreign bodies." Next to prevention, the best thing is, as in all diseases, early and capable treatment. Contact infection can be prevented to a large degree by guarding against rubbing of the eyes or fingering the lids unless the hands have been carefully washed and scrubbed in hot water and the nails carefully cleaned. This is of special importance where there is an infectious discharge, as from a running nose or ear, or a sore of any kind, recent vaccination, an itchy skin-eruption, pimple, or even slight scalp affection. Then, the danger of borrowing handkerchiefs, or using other people's towels must be borne in mind. Some of the worst eye infections have been spread in this way. If an eye-infection has actually developed, these precautions must be redoubled. Before and after washing or putting drops into a sore eye, the hands must be washed. Any cotton, or cloths used on an infected eye must be thrown into old paper bags and burnt up. Any instrument which is to come into contact with the eye must be sterile or surgically clean, that is, it must have been boiled or heated in cleaning so as to destroy all germs which may have been on it.

At the very threshold of life and light, the eyes are threatened with blindness. An infection not infrequently occurs at birth which passes away in a day or two with prompt treatment, requiring simply the dropping in a drop or two of nitrate of silver solution. The neglect of this simple disinfecting precaution may under certain conditions allow a pus inflammation to develop which readily destroys the transparent surface of the eye and leads to dense scars or to the complete destruction of the eye-ball. The virulence of the "matter" or pus in these infants' eyes is shown by the rapid progress of the disease, and by the loss of many eyes of nurses, parents and physicians from accidental but preventable communication of the infection while treating or caring for infants with pus-eyes. The disease is even more serious and rapid and communicable in adults than in children. The precautions of rigid cleanliness, isolation, sterilizing instruments, destroying used cotton mops and rags, and protection of the nurse's eyes by goggles while tending

the patient, are of vital importance. Slight injuries of the eye are often made serious by infection due to uncleanliness in the treatment, surely a preventable accident. This applies particularly to the attempts to remove cinders from under the lids or from the surface of the eye. Some of the home methods for these conditions are simply dirty. The easiest way to get out a cinder is to open the eye under the water, as by filling the washed palm of the hand and holding it up to the eye, or some similar method. This failing, a freshly laundered handkerchief may be used on the turned lid. Anything more should be left to a nurse or physician.

PREVENTABLE ACCIDENTS AND INJURIES OF THE EYE AND EAR.

We come now to a chapter which is not a pleasant one for physician or lay-man to read. In the home and at play children are exposed to many injuries of the eye and a warning to them may save from blindness. Little children should be forbidden to play with pointed instruments, as pens and pencils, and larger ones shown how to handle knives or scissors and not to "play" with them. Children should be taught that matches are not toys. Explosive caps, "toy" pistols, fire-works, gunpowder, are other sources of danger. The most rational procedure, I think, is to explain to children why these things are dangerous, and show them how they are to be handled if handled at all. Throwing sand or stones is a favorite pastime which has cost many an eye. Carrying walking-sticks and umbrellas under the arm up stair-ways is another favorite amusement of grown-up children. Bean-shooters, pop-guns, air rifles and putty-blowers, are a source of danger if carelessly used. Children should be warned, again and again, against pointing any arm at a living being. The sports of older children, especially games with bats and balls, are prolific of injuries of the eye, and as these games are a source of health and strength, it would be unwise to forbid them. The players should however be warned of the dangers and the necessity for caution both in looking out for their own protection and in taking care not to harm others. Those who wear eye-glasses should be particularly careful, as a smashed glass may turn a slight accident into a fearful injury. This applies also to the bursting of vichy siphons and beer bottles, and those who handle them should be warned to exercise caution.

Many trades and occupations, even household procedures, are carried on under conditions which are full of danger for the eye. In the home, careless use of hammer and chisel, scalding hot water, lye, acids used as bleaches, aniline pencils, gas-explosions, are among the most common. Almost all mechanical trades are inseparable from injury of the eye with minute chips or specks of metal, emery, stone, or glass. Riveters, knife-grinders, polishers, stone masons and stone-cutters, carpenters, are particularly exposed. In other trades irritating vapors are set free in the air and inflame the eyes and breathing passages. In many factories use is made of substances such as white-lead which not only causes "painter's colic" but may lead to blindness. Wood alcohol, an impure spirit used not only for legitimate purposes such as varnishing, but to adulterate perfumes and cheap drinks, is a most dangerous poison, and a small amount drank or even breathed in as fumes, say in a small room, may lead to incurable sudden blindness over-night. Inspection and rigid regulation are the measures to be used in dealing with these conditions. Trades which are "dangerous" for the ear are those which are noisy, as boiler-making, rivetting, exposure to explosions, blasting, or unusual air-pressure, as in tunnels, mines or caissons. Among children, the practice of stuffing peas, beads, and other small objects into the nose or ear may lead to serious trouble, especially if overlooked for some time.

If we are able to prevent all infections and injuries, there would still remain a very large and important field, hygiene, the proper use of the eyes and ears, and the correction, by suitable glasses, of any optical conditions which interfere with such use, lower vision, or cause eye-strain. Among optical conditions we mean far-sight (hypermetropia), near-sight (myopia) and astigmatism. The last is no actual disease but, like the others, an optical condition which can be neutralized and corrected by suitable glasses, that is, cylinders. Bear in mind that these defects, especially in the young, are not always made manifest by complaints of poor vision. The child may not know and the teacher may not recognize at once that a child does not see as well as its fellows. Special tests may have to be made of far vision, i. e., reading letters across the room, and of the accommodation of focusing power, i. e., the ability to see very small objects distinctly close to the eyes, as in

reading, sewing, and all such short range work. It is just this kind of work which strains the eyes most and if carried on under unhygienic conditions of defective illumination, position, type and printing, or of eye-structure leads to deterioration of vision and many other troubles.

Parents should realize that eye-strain may be at the bottom of much vague discomfort or actual sickness in children. It may make them inattentive, apparently stupid, peevish, cranky, fidgety, or disobedient. Every child which falls behind in its school work or is "hard to manage," should have its eyes examined and carefully tested by a capable oculist.

We should exclude or relieve eye-strain before jumping to a conclusion of infantile hysteria, nervousness, or "natural cussedness." If children complain of dull headaches, the eyes ought to be examined at once. In fact, all children should have their eyes looked after before going to school, and yearly thereafter, just as the teeth are kept under observation.

Eye-strain may masquerade under a thousand different disguises, as headaches, as St. Vitus' dance, as biliousness, nervous indigestion, periodic vomiting, nervousness, and be shown by red lids, twitching of face and eyes, rubbing the lids, frowning, peering or "squinting," as it is sometime called, that is screwing up the lids. Actual squint, otherwise known as "cast" or cock-eye, a condition in which the two eyes do not look at the same point, is an affection of the muscles which turn the eye-ball to look at a thing, or "fix" as oculists say. Defective sight in one eye is often a cause of this condition and when corrected in time may prevent a deformity which frequently requires an operation for its correction. I have spoken of eye-strain in children because childhood is the time of most rapid change and growth of the eye, but "grown-ups" too should be on the lookout for eye-strain and insist on a careful examination of the refraction if their eyes are not comfortable or if they are headachy, dizzy, bilious, nervous, or have "indigestion." With properly fitted glasses or with normal eyes, all work should be done under sensible conditions. This means good light—on the paper or book, not shining into the eyes from the front. Fairly large type, good ink and good, clean, not highly calendered or "shiny," paper, and finally a position which shall not cramp the reader in any way. Reading on into the dusk or in a dark corner of a room should be absolutely forbidden. Reading in bed is harmless. The light, behind and above the pillow, is in the best possible position. The book should be held up, however, so as to be level with the eyes, otherwise there will be muscle strain from looking down continuously.

To conserve sight, the eyes, presupposing that they are sound, must be used in a rational way and kept in good condition; that is what we mean by hygiene. The essentials of ocular hygiene are; good, steady light on the work or reading matter, not in the eyes of the reader, good print, the protection of the eye from foreign bodies in dangerous trades, and the avoidance of the numerous causes of ocular disease mentioned in prevention. Last, but not least, the vision and refraction should be tested regularly and any defect corrected by glasses, especially in children. Schools, work-shops and factories should be illuminated by special systems which have been worked out in detail by illuminating engineers. This is a measure of general safety as well as of ocular hygiene. Beauty and utility in books, magazines, signs, posters, and advertisements, is quite compatible with large legible print. Much could be done to avoid injuries to the eye from dust and dirt in streets and in certain factories. This applies particularly to sand and grit carried about by winds from excavations and building operations. Other obvious sources of danger are presented by smoke and flying sparks, irritating vapors and gases in trades or domestic occupations, and finally the poisons which destroy sight, first and foremost, wood alcohol, and in second line, tobacco and strong drink.

The hygiene of hearing and the care of the ears is intimately connected with the care of the nose and throat, and teeth, free nose breathing, development of chest expansion, prevention of common colds and the little less common snuffles. Good general health and freedom from the acute infectious diseases, which, as we have pointed out, are almost without exception contracted by respiratory infection, would cut down deafness more than half. Unnecessary noise is not only a nuisance but a menace to sound ears, to the nerves, and to the voice. This last may seem strange, but it is beyond doubt that much vocal trouble is due to straining the voice, shouting, or screaming at a high pitch in an effort to make oneself heard above the din of our unnecessarily noisy streets, roar-

ing subway or elevated trains, shrieking, groaning auto horns, and clatter of iron-riveting, din of whistles, motor-car cut-outs, and the thousand and one auditory inflictions of city life. The mental and emotional benefits of quiet are not yet fully appreciated. It would be a consummation devoutly to be wished for if we could have Maxim silencers for typewriters, boiler factories, and other noise producing agencies.

SOME EYE AND EAR DON'TS.

Don't touch an eye with an unwashed hand. Don't wipe your eyes with any but a clean handkerchief. Don't rub your eyes with your finger at all. If your eyes itch, wash them with hot water and have them looked after. If you get a cinder in your eye, try to keep it open for a minute or two, or open it under water. If that doesn't help get some one to turn the upper lid and lift the cinder off gently with the end of a freshly laundered handkerchief, or, if alone slide the upper lid over the lower. For anything further get a physician. Don't let children play with fire, matches, knives or scissors. Use common sense and some care in opening cans, pulling nails or handling tools generally. Don't run about carrying pointed instruments. Don't get too near long hatpins or have them sticking out yourself. Don't think a child will "out-grow" a squint. Have it looked after. Don't consider a child's headache a trivial matter. If they come often, have the eyes examined. Don't read in the dark, or with the light in your eyes, or badly printed books, or, if you can help it, on cars. Don't neglect an infant with "matter" in its eyes. Have a doctor see it at once. Don't be ashamed to wear glasses if they are going to help you. Don't be afraid that they will give you the habit. You may need a good habit. Don't look into the sun to show how strong your eyes are. It has been done before by many fools and proves nothing but that you are willing to ruin your eyes. Don't try to get along without glasses when you know you need them. Don't lend or borrow spectacles. Don't go to a jewelry shop to have your eyes examined.

Don't give home remedies for headache to any child.

Don't allow a child to put beans, peas, beads, or other bodies in its ear or nose. Don't put anything into the ear but the point of your elbow.

Don't try to get anything out of the ear but hearing.

If the ear aches, put a hot-water bag over it or a moist hot gauze compress. Don't put laudanum, hot oil, or other stuff into the ear. If the hot-water bag does not relieve, a little hot water and glycerine can be dropped into the ear. This can easily be washed out again by the doctor. Don't neglect an earache in a child. It may mean only a sore throat. It may also mean serious danger for ear, brain, and life. Have the doctor decide. Don't forget that *repeated* attacks of earache, *however mild*, mean that there is something wrong with the nose and throat requiring attention. The same thing applies to repeated colds. Don't breathe through the mouth, but through the nose. Don't let "stuff" accumulate in the back of the nose and block the breathing passages. Keep the nose clear by blowing as often as necessary. If crusts form in the nose drop or spray into the nose a little bland oil or liquid vaseline. Don't be afraid of cold air. "Colds" don't come from cold but from exposure to draughts when overheated, lack of ventilation, muddy dirty streets, improper clothing and sudden changes of warm and cold. Don't pull or box the ears under any conditions. If you must use corporal punishment, nature has provided a better place to apply it.

MASCULINE PRIDE.

A TALE is going about concerning a little boy who was on a visit and found himself without a night garment. His nurse managed to borrow a little girl's night-dress. But the stalwart little male resented the idea of putting it on:—

"I won't wear a girl's nightie. I'd rather sleep raw!"

A thousand people are engaged in lopping off the branches of evil to one engaged in axing at its root.

Policeman (to cab driver gazing at horse's tail)—Didn't you ever see a horse's tail before?

Cab Driver—No, I always saw a horse's tail behind.—*The Carteret.*

INFLUENCE OF THE IMAGINATION ON THE BODY.

By C. W. Super,

Every one who has given the matter any thought knows that the mind exercises a potent influence upon the body. It has been a matter of common observation both by philosophers and physicians from the time of Hippocrates and Socrates to our own day. Every medical practitioner knows that the patient loses hope; if he "gives up" the chances for his recovery are much diminished. On the other hand, the determination to get well is almost as powerful as medicine. Hence arises the problem whether the mind rules the body, or vice-versa. That the living body can exist and function as an organism after the mind is completely gone is a well established fact. Whether the mind or soul can exist apart from the body, or rather after the body in which it was a tenant has disintegrated, is a problem in the solution of which, some of the brightest and most scientific minds of our day are engaged. It has, however, not attracted the attention of physicians so much as of psychologists and physicists as it is not really a medical problem. That the mind can be trained to govern the body nobody doubts. Moral conduct is based on this assumption. There can be no moral or legal responsibility, if the intellect is not supreme and if there is no such thing as rational insight.

Two somewhat remarkable cases that demonstrated the influence of the mind upon the body were brought to my attention many years ago. When I was a small boy on a farm in Pennsylvania, a vendor of patent medicines, drugs, essences and other like commodities used to visit our neighborhood every few months. One day as he was driving along the road he began to feel bad and recollecting that he had near him a drug that was guaranteed to meet such cases reached down among his bottles, took out one that he supposed to be a tonic and without looking at the label swallowed a little of its contents. A few minutes later he had occasion to visit a farm house that stood a furlong from the road. After tying his horse he started to walk up the path toward the house when it suddenly occurred to him that he had taken poison by mistake. He began to feel so much worse at once that he could hardly walk. But not wishing to turn back until he had performed his errand he made his way as best he could to the house, although when he reached it he was so weak that he could scarcely drag himself along. However, when he got back to his wagon and had made sure that he was not mistaken in the medicine he had swallowed he began to improve at once. Some months later the man told my mother that he believed he would have died if he had remained an hour or more under the delusion that he had taken poison.

The following anecdote I heard my father tell more than once. A farmer of his acquaintance had a wife and three children. From some cause the woman became a hypocondriac and imagined that she would speedily die. She took to her bed and all the efforts of the neighborhood physician to convince her that she was mistaken proved unavailing. Time after time she would send for her husband when he was at work in the fields for the purpose of bidding him a last farewell. The farmer finally decided to refer the case to another physician. This man at once discovered "the lay of the land." He told the unfortunate husbandman that he had been too patient with his patient, and that if he could make her angry or arouse her jealousy she would get up at once, for medicine would do her no good. Now it happened that there was an old maid living in the neighborhood named Jane Kitchin to whom the wife had a mortal antipathy. The next time she sent for her husband he came to her bedside and said: "Well, Mama, if you are going to die I wish you would hurry up. You have been talking about it so long that I have made preparations for it. After

you're gone I'm going to marry Jane Kitchin and affairs in my house will go on all right." The patient forthwith leaped out of bed declaring that Jane Kitchin should never rule over her children, and that she would take charge of her own affairs. And she did. One of Moliere's best comedies and his last, "The Imaginary Invalid" was written to ridicule persons who believe they are sick when they are not, but incidentally also the medical profession of his day. This comedy was very popular and was played sixty-two times in Paris during the first two years after its appearance. The burlesque reception of the physician in the play seems to have been taken from real life. A few years after Molière's death John Locke was present at the conferring of the degree of doctor at the university of Montpelier. The physicians in the procession were clad in red, wore black caps on the heads and were followed by ten violin players. The president of the university made a speech against the recently broached theory of the circulation of the blood after which a red cap was placed upon the head of the newly made doctor, a ring on his finger and a gold chain about his loins. No wonder he thought he was a great man. Yet his greatness consisted mainly in knowing very many "things that ain't so" as Josh Billings says. In the year 1800, that is more than a century after this event medical science can hardly be said to have existed. Human anatomy was better understood than in the time of Galen, but therapeutics had made little progress. It is a question whether real or imaginary disorders have caused the most suffering in the world. We need only to reflect upon the witchcraft delusion to realize that the question is not easily answered. There are few more gruesome chapters in modern history than those dealing with witchcraft. Almost from the first, voices were raised against the cruel delusion by physicians and others, but popular ignorance was too crass to listen to the voice of reason when it was lifted up against prepossession. It is to the everlasting credit of Martin Luther that he raised his voice against it. But most of his followers were less wise. If science had never done anything more than dispel this frightful delusion it would have contributed enormously to the happiness of the human race. It is worth a passing remark that the very recent doctrine of telepathy bears some resemblance to witchcraft. If thought can be transferred through space from one person to another, why may not persons disposed to harm others manifest their malice practically in this way?

Athens, Ohio.

SUGGESTION.

In one of our great hospitals here it has been the custom for a long time to use for treatment by suggestion a tuning fork, which is known at that hospital as a magnet. It is not a magnet; it is merely an ordinary, plain, rather large tuning fork. But people have, as you know, a very curious superstition about the action of magnets, and believing this tuning fork to be a magnet, they attribute occult and wonderful powers to it. When placed upon a supposedly paralyzed limb or on the throat of a person who thinks he cannot speak, it has wonderful powers just because it is supposed to be a magnet when, in fact, it is a tuning fork. I remonstrated once with the gentleman who uses this tuning fork because, so far as I could see, it was a lie, like other forms of quackery; but he said, "Why, no, it does a great deal of good; it cures the patients." I replied that I had no doubt of that. So does skunk oil; so does the magic handkerchief which Francis Truth has touched; so does the magic ring, the electric belt and the porous plaster. In another great hospital in this city electricity is used in the same way. Electricity has medical action, of course, in some cases, but it is used also in a great number of cases where it is not supposed to have any medical action because it has so strong a psychical action. When one sees a brass instrument that looks like a tendrac approaching one's body, and feels long cracking sparks shoot out of its prongs against his body, it naturally makes a *very strong* impression upon one's mind.—*Dr. Richard Cabot.*

THE SUBCONSCIOUS MENTALITY.

H. Addington Bruce writes thus in *The Semi-Monthly Magazine*:

"When a scientific friend once asked the late Professor James what he hoped to accomplish by his persistent delving into occult phenomena, his instant reply was: "To find balm for men's souls." And undoubtedly this answer summed up with incisive vividness the chief motive that, from the days of the early eighties when organized psychical research came into being, has led scientists of such pre-eminent standing as Professor James, Sir Oliver Lodge, Sir William Crookes and Cesare Lombroso, to disregard the sneering criticisms of their colleagues and to adventure into the bewildering realm of the weird and the uncanny. One and all, they hoped to gain scientifically acceptable evidence validating the traditional belief of mankind in a life beyond the grave.

"But there was another motive prompting them to undertake their ridicule-provoking task. This was their realization that the progress of knowledge has always depended on the degree of attention paid to the 'unclassified residua' of the facts of experience, and that the obstinate refusal of the scientific world in general to pay any attention whatever to unclassified residua like hauntings, apparitions, premonitions and mediumistic communications, quite possibly involved serious gaps in a full understanding of the nature of man here on earth. 'Is science a completed book?' these open-minded thinkers asked. 'Do we know everything that is to be known concerning ourselves and the universe in which we live? Or is it not our duty to seek to win a larger knowledge by whatsoever means are available to us, and no matter how laborious or distasteful the work of investigation may be?' In this belief, and from this point of view, William James and his fellow psychical researchers attacked the mysteries of spiritism.

"The result has been to justify abundantly their courage and their confidence. If the actuality of the soul's survival still baffles scientific demonstration, the effort to demonstrate it has most assuredly enriched our knowledge of the human mind, and has brought to light facts not only of an astonishing character but of immense significance to the interests and needs of everyday life. So true is this that to-day, especially in the fields of medicine and education, practical application is being made of novel principles and methods, the discovery of which has been directly or indirectly due to psychical research.

"Take the now well-established psychological law of 'subconscious mentation'—the law which affirms that all of us constantly perceive and remember far more than we appreciate, and that these subconscious perceptions and memories often exercise a controlling influence over our conscious thoughts and behaviour. Out of the discovery of this vital truth has resulted on the one hand a complete explanation on a naturalistic basis of many phenomena formerly reputed to be supernatural, and on the other hand recognition of the tremendous rôle played by subconscious ideas in affecting one's character and career, and even at times in affecting bodily health. There cannot be the slightest question that psychical research first put science in earnest on the trail of the subconscious, and that to it must be credited much of the strongest evidence substantiating this hitherto unsuspected phase of the mental life of man."

As to hypnotism, automatic writing, crystal gazing, clairvoyance and the like:

Gurney made the important discovery that persons on being brought back to consciousness from hypnotism have no conscious recollection of what transpired during that state, except (observes Bruce) as brought out by some such means as "automatic writing" or gazing into a crystal or some other bright object, as a glass of water. For instance, one dehypnotized would be given pencil and papers; a screen being then placed between his face and the

paper so that he could not see what he was writing, he would write down statements made to him under hypnosis, without being conscious of the words he was forming. And a dehypnotized person being lead to gaze into a crystal would see in it hallucinations representing the ideas conveyed to him during hypnosis, without comprehending that these pictures represented information given him in that state.

Thus the phenomena of automatic writing and crystal gazing have been proved not to be supernatural but scientific; they simply prove anew that the supernatural is as yet unexplained. And those "sensitives" who write trance messages, see visions, dream dreams and do clairvoyant stunts generally are simply drawing on forgotten reminiscences. Nor can they prophesy the future except as they are able to draw shrewd inferences out of their past experiences. Now, as ever, you really cannot successfully prophesy unless you know.

S. Lowes Dickinson, a psychic researcher, has provided a most clarifying instance: A trance medium or "sensitive" who was not at all an imposter, considered that she had come in touch with the spirit of one Blanche Poynings, who described herself as having been a great friend of the Countess of Salisbury in the reign of Richard Second. The spirit in Blanche seemed to have talked to the sensitive at several seances attended by Mr. Dickinson about the Countess and her husband, the Earl of Salisbury. This Countess had been much married—three times her former husbands having been one Aubrey and Sir Alan de Bruxhall. Blanche gave the names of the Countess's various children, described the Earl as a cultivated, talented gentleman, with some curious episodes in his career; gave her own maiden name—de Manbray, the name of Sir John Worth, whom she married after Poyning's death, told how she had been expelled from court by Arnold, one of the Lords Appellant, with other information that added verisimilitude to the narrative.

Here was a case of "spirit communication" that most people would have concluded would down any skeptic. Besides, Mr. Dickinson, my rumaging diligently through old chronicles, charters and passages found almost all of Blanche's statements to lie on fact. And the sensitive assured him she had never studied the English history of that time and knew nothing at all about it. And anyway some of the facts given were such as not even a deep student of history would have happened on. Blanche herself was an unimportant personage, just a lady in attendance on the queen.

However, whilst taking tea an afternoon with the sensitive and her aunt, Mr. Dickinson learned that there was a plambetle in the house with which she could do automatic writing. So, it being brought out, he put questions to it bearing on the Blanche Poynings messages and elicited that corroboration of these messages could be found in a book by Emily Holt entitled "Countess Maud." Then the sensitive recalled that she had once read a novel by that title, though neither she nor her aunt could remember anything about its plot, nor the period with which it dealt, nor even whether it contained any mention of Blanche Poynings.

A few days after Mr. Dickinson managed to procure a copy of the book and found in it practically ever person and every fact that had been given by the alleged spirit of Blanche Poynings. So, on her own perfectly frank admission the "sensitive" had elaborated the communications out of her subconscious retention of a book she had at 12 years of age heard her aunt read, had herself gleamed through and had so completely forgotten that she could recall nothing about it during her conscious hours.

THE POWER OF WORDS.

Words, when well chosen, have so great a force in them, that a description often gives us more lively ideas than the sight of the things themselves. The reader finds a scene drawn in stronger colors, and painted more to the life in his imagination, by the help of words, than by the actual survey of the scene which they describe. In this case the poet seems to get the better of nature. He takes indeed the landscape after her, but gives it more vigorous touches, heightens its beauty, and so enlivens the whole piece, that the images which flow from the objects themselves, appear weak or faint in comparison with those that come from the expressions.—*Joseph Addison.*

HOMOGRADE.

By F. E. Aspinwall, M. D., La Grange, Ky.

This is the latest thought in thermometers. In the Homograde the normal human animal heat at or near the surface of the body where sensation mostly exists is the unit of value and every degree in the scale is equivalent to the hundredth part of that unit. Thus every degree and every figure in the scale has an instantly apparent and definite value, and all temperatures are at once understood by comparison with the accepted normal animal heat.

The Homograde scale may be briefly described as follows: Beginning with 0 at the freezing point, 270 is placed at the boiling point of water. This brings 100 at the accepted normal for blood heat, viz., 98.6° F., or more exactly 98⅝° F.

In the finished thermometer the figures from 0 upward are placed to the left of the tube; those below 0 are placed to the right of the tube, thus showing instantly when the minus sign is to be used in recording temperatures and lessening the liability to error. In the clinical thermometer the figures from 100 upward are placed on the left side of the tube, and from 100 downward on the right side of the tube, the 100 being on both sides. On the back of the tube is the wording: "Homograde. 100 Normal." This makes a beautiful thermometer with strikingly fitting figures which show instantly the percentage of departure from the normal. Thus 100° H. represents the normal animal heat, an even 100%, when, as far as temperature is concerned, there should be perfect comfort. 105° H. would show a 5% increase above normal, a moderate fever. 110° H. would mean 10% above normal heat, a vital disturbance of about double the force and probably danger indicated by 105° H. 95° H. would be 5% below normal, probably only a temporary loss of surface heat. Now these figures are so strikingly fitting and give so clear an understanding of animal heat conditions that they are not likely to be forgotten by either physician, nurse or student.

It is not alone in the clinical section of the score that the Homograde figures fit. They fit everywhere, and at all important points "round numbers" prevail. Thus 0° H. represents the point at which all animal life has ceased to be manifest. Changes of temperature below that point do not count at all in animal life. Hence the appropriateness of expressing animal heat in degress above freezing. And with 100 representing the human animal heat the Homograde thermometer harmonizes with and aids human nature in its tendency to compare and measure all other temperatures with its own. Even the boiling point of water is better understood by this comparison, it being shown to be, according to altitude, 2.5 to 2.7 times higher above freezing than the animal heat. The fitness of the Homograde figures is further shown in the ideal way in which the seasonal temperatures divide as follows: Winter 0° to —50°, extreme below —50°. Spring and Fall above 0° to —50°. Summer above 50° to 100°, extremes above 100°. 50° H. beautifully represents one-half or 50% of the animal heat, an atmospheric temperature that is most agreeable for either work or play in moderate clothing.

To still further illustrate the features referred to I suggest for both temperatures the following scale, the figures representing degrees Homograde: 110 hot, 100 very warm, 90 warm, 80 tepid, 70 cool, 60 very cool, 50 cold, 40 very cold, 30 "frigid." All temperatures below 50° H. are very chilling.

The Homograde figures are not thus fitting accidentally. They are so because the scale is perfectly adapted to themometric use

Often users of the Fahrenheit thermometer spend time and energy calculating the number of degrees above or below freezing, which they instinctively recognize as the

proper point to reckon from, and this to little purpose, since after that is accomplished there is nothing in the scale to indicate the value of a degree or any number of degrees. Hence is seen the need of a thermometer having a scale starting at freezing and so graded that every figure has a clearly apparent and definite value. For example, what is the value of 50° F.? Or what is the value of one degree Fahrenheit? The writer has yet to meet the first person who could give a satisfactory answer to either question. By changing 50° F. to its equivalent 27° H. it is instantly shown to be 27% of the animal heat. The inappropriateness of the "50" is self-evident.

Again, to the people generally, and especially to physicians and nurses, 37° C. normal for blood heat is not likely to be entirely satisfactory. The figure does not seem to fit. Besides, with that scale how would one arrive at the relative value or percentage of any variation from the normal? This latter is important, since in no other way can we reach so clear an understanding of temperature variations. Nor in studying ordinary temperatures is the boiling point 100° C. useful for comparison, since that point is inconceivable, far beyond the recognition of the sense of feeling. This brings us to the human animal heat as the only true unit of temperature value. And 100 at this point gives every degree in the Homograde scale the value of 1% of that unit.

The only redeeming feature of the Fahrenheit thermometer is its short degrees. The Centigrade degrees are exceeding long, necessitating much use of fractions. It is, however, much in favor in various scientific fields, its long degrees being divided into fractions to suit. But the masses of the people, including most physicians and nurses, would greatly prefer the Homograde thermometer with its short degrees and well fitting figures.

The Homograde scale alone without the instrument is useful for determining the value of temperatures expressed in terms of other thermometers. All who are interested in temperature studies will find it both interesting and instructive to convert the Fahrenheit or Centigrade figures into their Homograde equivalents. Throughout the Homograde scale there are exactly three degrees to every two degrees in the Fahrenheit scale. Hence to convert Fahrenheit figures to Homograde find the exact number of Fahrenheit degrees above or below freezing and increase that number one-half. Thus: 50° F.=50—32=18+9=27° H. To change Centigrade figures to Homograde multiply the Centigrade figures by 2.7. Thus 50° C.=50×2.7=135° H. Which latter figures signifies 135% of the animal heat. By these simple processes we are enabled, instantly they are accomplished, to know the real value of the temperatures we are studying. A knowledge of the Homograde scale, therefore, should be possessed by all students of temperature and especially physicians and nurses. While the scale alone will be found interesting and instructive, the thermometer would be found exceedingly satisfactory. In fact once used no other will fully satisfy.

During the past quarter of a century the writer has given much thought to this subject, to which before perfecting the scale several months were devoted exclusively, not for pecuniary gain, but to be able to offer to the world a short degree thermometer to take the place of the unscientific and unsatisfactory Fahrenheit with its misfitting figures. And he has succeeded far beyond his original aims and expectations, for many good features and advantages of the Homograde thermometer became apparent and were first thought of after perfecting the scale.

Yes, the Homograde thermometer scale is now perfect. No change for the better can be made. Theoretically the instrument is as fixed and precise as any other, and nothing whatever stands in the way of making it actually so. It is ready for manufacture and introduction. It is my gift to the world if the world will accept it. The extraordinary satisfaction that it is calculated to give should make sure its acceptance.

This is from Australia: "Gentlemen, a member of this House has taken advantage of my absence to tweak my nose behind my back. I hope that the next time he abuses me behind my back like a coward he will do it to my face like a man, and not go skulking into the thicket to assail a gentleman who isn't present to defend himself."

An eloquent Irish candidate, speaking of a certain eminent statesman, said:

"His smooth tongue is that of a serpent which lures but to destroy, and which holds out sugar plums in one hand, while in the other holds an unsheathed dagger behind its back."

RURAL SANITATION.

BACK TO THE LAND.

THE slogan Back to the Land, whence must come almost all of human nourishment and of human wealth cannot be too often raised; not nowadays, when the sons of farmers and their daughters too, are so insistently leaving the blessed green fields to become merged oftentimes so miserably and with so much disappointment in the maddening crowds of cities. We note then, with peculiar gratification that the Long Island Agricultural School is building on farm, pasturage and wood land near Farmingdale, L. I., and it is hoped this institution will play an important part in shaping country life, in reducing the high cost of living and in influencing beneficially and generally the economic situation in and near the metropolis. In this school young men from thirteen up will be trained to be not only scientific but practical farmers, a love of the soil will be inculcated in them; and it will try also to make girls and young women practical housewives, able to cook, to sew, to take care of homes and, most of all, to economize. The young men will do actual farm work; the young women will live in cottages, in which they will do all the domestic work. Albert A. Johnson, Esq., at present the Director of the Milwaukee County School of Agriculture, at Wauwatosa, Wis., is to control the destinies of the Long Island School.

We have mentioned thus far only the youth of the land. But all ages desiring instruction will be welcomed under Mr. Johnson's directorship. He has had students anywhere up to 78 years of age. In his Milwaukee County School there are now, for example, three generations of one family. There are more than seventy-five mature women, mostly married, and with families, all taking up practical work. The poor and the rich are alike there to learn; the wife of the poor man, perhaps, if for only one thing, to be able to take a cheaper cut of meat and prepare it so that it will be as highly esteemed as a more expensive part of the beef.

In the Farmingdale School the successful business man who is retiring may come out to study about poultry, say; and he can have that information alone, if he wants no other. Then there are thousands of abandoned farms; many of these have been bought by city men of means as "country places." These city men can learn a lot how to develop their country places under Mr. Johnson's directorship.

Mr. Johnson believes that it is not possible to teach farming without a farm; and there is at Farmingdale "a laboratory" of almost 300 acres in which the students will do practically all the work. The buildings with many details we cannot here describe, save that there will be an administration building; an educational group (the agriculture, agromony, science and domestic science buildings, gymnasium, greenhouse, library and store); the farm group (machinery, farm mechanics, poultry and stock judging buildings, horse, cow and storage barns and power house); and the residences of the Director and the professors. And there is to be a band stand. To the left of the educational group will be the boy's dormitories; to the right the girls' cottages—some forty of the latter and of the kind that would probably be rented to the average dweller in the suburbs and costing about $4,000 apiece.

The girls will get their first training in the domestic science building, but much of it in their third and fourth years will be in the cottages. They will be marked each day on the way they keep house. The store will be located near their quarters, and there they will get their training in buying. Then they will have to prepare their food. After a little time, the senior girl in each house will be responsible for it, and during the course each girl will have had one year's experience in actual charge of a house. For each cottage there will be a flower and vegetable garden which the girls will be expected to take care of. Each house will ,in short, be a practical home.

In this school there will be no tuition for residents of New York State, for it is a State enterprise. Living expenses will be just what they cost; in Milwaukee the charge for board is $18 per month. After the first year the school will produce all its own vegetables and sell them to its own refectory. No one will be sent to this school; all will come of their own free will. And the sessions will continue through twelve months of the year; and it is expected the attendance will be greatest when other schools have their vacations.

Regarding extension work: Instructors will go about among farmers. If a farmer has difficulty with his herd of cattle, the School will send its dairy expert to confer with him and there will be no charge for the service. If the potato grower or the chicken raiser has any trouble the school's experts will go and help solve the problem. A one week school will also be conducted in rural communities; lectures will be given on various subjects; and much will the be done by correspondence.

THE COUNTRY DOCTOR.

Day in, day out, night out, night,
Where snow is thick and fees are thin,
He hustles with his cherry grin
To fight with ills.
The drives are long, the nights are cold,
He suffers hardships left untold
To call upon some mother old
Across the hills.

Little he says about his pay;
Often he gives his skill away,
And tho's he's getting bent and gray
He has no wealth.
His life has been an endless trial,
His motto has been self-denial;
Freely he gives from every vial
For some one's health.

The gallant soldier goes away
While fife and drum and bugle play
Bravely to conquer or to slay—
That is his part.
The country doctor rides alone
Through rugged roads, o'er stick and stone,
To heal men, not to make them moan;
God bless his heart!

—William F. Kirk in *New York Evening Journal.*

"Are you the same man who ate my mince pie last week" inquired the matron.

"No, mum," murnfully responded the tramp; "th' doctor say I'll never be th' same man again!"

Lots of men know a good thing the minute the other fellow sees it first.

The veil which hides the future from view is a fabric woven by the hand of mercy.

LAYERING IN GARDENS.

Gardeners have learned to employ four different kinds of layering, all amounting to the same thing, of course, yet varying a little bit. All depend upon the same two principles, that is, that roots like darkness and that an interrupted flow of sap in a branch tends to make that branch put forth new roots to restore this flow to its normal volume and thus restore to the branch its normal amount of nourishment. When a plant is growing above ground, buds and branches rise out of the stem at certain definite places along its length. These places are called "nodes," and the spaces between them are called the "joints" of the stem. When a stem is covered with earth, it is at these nodes that roots are more likely to arise than elsewhere along the stem.—*St. Nicholas.*

THEY CERTAINLY SUFFERED.

Lady: "I am collecting for the suffering poor."

Man: "But are you sure they really suffer?"

Lady: "Oh, yes, indeed. I go to their houses and talk to them for hours at a time."

Visitor—Nothing stirring on the campus, I see. Vacation is on?

Student—Not much. The crew has gone to Billowpoint, the baseball team is on the Southern trip, the track squad is trimming everything in the West, and 90 per cent. of our faculty is attending scientific conventions abroad—the highest percentage of any American university."—*Puck.*

Love is like a Spanish hotel; one finds in it what one brings with one.

MILK.

Prof. Milton J. Rosenau, of the Harvard Medical School, in his admirable work The Milk Question (Houghton, Mifflin Company) considers that the right kind of natural milk, obtained from clean and healthy cows, is better than questionable milk made relatively innocuous by pasteurizing. But as only about one per cent. of the cow's milk consumed is "guaranteed milk" general pasteurization is most advisable.

"While milk is the most innocent-looking, it may occasionally be the most dangerous of foods. When all indictments are brought together we find that milk is an enormous criminal. The conditions on the dairy farm are oftener much worse than those at the slaughter house, and the dangers are much greater. One of the greatest tragedies for the sanitarian is to see disease and death follow the trail of infected milk into households that are otherwise in prime sanitary condition. Infected milk is an extravagance that even the millionaire cannot afford; safe milk at a fair price is one of the cheapest forms of insurance."

In one little town recently there was an epidemic of septic sore throat, which caused sixteen deaths, and the illness of upwards of 400 residents. The whole thing was attributed to infected milk.

In the past five years, Dr. Rosenau points out, Boston alone has had 4,095 cases of disease in epidemic proportions which have been traceable to milk. He enumerates among the diseases known to be conveyed by milk tuberculosis, typhoid fever, scarlet fever, diphtheria, sore throat, foot-and-mouth diseases, malta fever, milk sickness, and occasionally others. The list does not take into consideration the dysenteries and gastro-intestinal diseases of babies.

Rosenau does not maintain that "every portion of milk is a potion of poison." He emphasizes the danger and indicates the remedy. He recognizes the fact that milk is an essential diet for children and a very important article of diet for adults.

Pure, fresh milk, he says, is the ideal towards which the public should strive, but until milk is absolutely safe, he argues that our only protection is through pasteurization. This remedy, together with an efficient system of inspection, is the true method of solving the milk problem. The great stumbling-block in the way of reform, he says is the dis-inclination of the consumer to pay a fair price for a fair article.

As to septic sore throat: "A disease variously known as 'septic sore throat,' "streptococcus,' 'tonsilitis,' 'agina,' 'sore throat,' etc., is sometimes conveyed by milk. Outbreaks of sore throat due to infected milk have not been recognized in this country until recently. In May, 1911, an outbreak involving several thousand persons occurred in Boston. Since then, similar outbreaks have occurred in other places throughout the country. The disease is evidently spreading. In March, 1908, a similar outbreak occurred in Christiana, Norway.

"'Septic sore throat,' due to infected milk, is well known in Great Britain. Swinbank and Newmann (1903) even go so far as to say, 'It is safe to assume that a year never goes by in which there are no outbreaks of sore throat or tonsilitis due to milk or cream.' Outbreaks belonging to the tonsilitis or quinsy type (septic sore throat), more or less paralleling the Massachusetts epidemic, were reported at Aberdeen and at Rugby School in 1881, at Dover in 1884, at Edinburgh in 1888, at Rothesay in 1890, at Hackney in 1900, at Lincoln and Bedford in 1902, at Woking in 1903, at Glasgow and Paisley in 1904, and at Colchester in 1905. The evidence that the disease was spread by milk is quite convincing in almost all these cases, and in many of them the character of the disease, called by English sanitarians 'septic sore throat,' was exactly as noted in our country over the past year."

Professor Rosenau has given a somewhat detailed analysis of the extensive and serious outbreak of "tonsilitis" which occurred in Boston, Brookline, and Cambridge in May, 1911. There were in all more than 2,000 cases, with about forty-eight deaths.

"This was not only the most widespread and serious, but the first epidemic of this kind traced to milk in this country. It corresponds in all essential particulars to the

outbreaks of septic sore throat which have frequently been reported as occurring in England.

"Two forms of sore throat occurred at the time. The clinical and epidemiological features of these two forms of sore throat gave the picture of two separate and distinct diseases; the one ordinarily diagnosed 'tonsilitis' was benign, directly contagious, and presented no unusual features from the usual sore throat more or less prevalent in almost all large communities; the other disease, which we will call 'septic sore throat,' was malignant, not readily communicable from person to person, and presented special clinical features.

"The unusual clinical features of this epidemic disease were its extraordinary virulence, the comparative immunity of children, the high mortality among the aged and infirm."

According to Professor Rosenau, the epidemic of 1911 was due to the distribution of milk. The outbreak was preceded by a similar outbreak of the disease in a section centred about Marlboro a month or six weeks before. Milk was received from dairy farms located in the section where the disease prevailed, and, although no record was obtained of any well-defined cases of tonsilitis in direct contact with the milk, cases were known to have occurred at the proper time in a family of one of the farms from which a portion of the supply was drawn.

"It is presumed then that the actual infection got into the milk from a bacillus carrier or a mild or missed case. A careful veterinary examination failed to disclose any disease of any of the cows furnishing the milk in question sufficient to account for the infection.

The investigation which followed the epidemic of 1911 indicated that the disease jumped Boston by express, and that the outbreak was rather strictly limited to the distribution of the milk. Approximately 800 cases were found in the Back Bay district, more than 1,000 in Cambridge, and at least 265 in Brookline. The disease began about May 8, reached a maximum May 14, and suddenly ceased May 19 to 22. Twenty-two per cent. of the households affected had three cases or more. The distribution of the epidemic, Professor Rosenau says, exactly coincided with that of one of the two main supplies of a distributing milk concern.

On the general subject of infected milk, Professor Rosenau says: "By infected milk we mean milk containing the virus of one of the infectious diseases. When infected milk is consumed raw, it is apt to become infective milk. Some of the diseases transmitted or supposed to be transmitted, through milk, come from the lower animals; some from man. The more serious infections, however, come from human origin. Man contracts most of the diseases to which he is heir from his fellowmen. Cows do not have typhoid fever, scarlet fever or diphtheria, so that when milk contains the viruses of these diseases the infection usually gets into the milk, either directly or indirectly, from human sources.

"When all the diseases due to impure milk are counted up the indictment is a strong one. While pointing out the dangers, we must ever be mindful of the fact that our object is not to discourage the use of milk—only to discourage the production and use of impure milk. We want to encourage the use of good milk as one of the best and cheapest foods on the market. Milk-borne epidemics vary greatly in prevalence and severity. Only one or two persons may be involved, or the epidemic may include several thousand."

The following table has been compiled by Professor Rosenau to show the results of recent milk-borne epidemics in Greater Boston:

	Cases.
1907—Diphtheria	72
1908—Scarlet fever	717
1909—Typhoid fever	400
1910—Scarlet fever	842
1911—"Tonsilitis"	2,064
Total	4,095

"Other cities have also been sufferers, but milk-borne outbreaks are not always reported as such. It is, therefore, probable that more cases of sickness are due to infected milk than appear in the official returns. Further, it is evident to students of the subject that many a milk-borne outbreak escapes recognition. Small outbreaks of two or three cases in villages and towns are often passed over as trivial occurrences. However, two cases of typhoid in Podunk, with a population of 1,000 persons, is equivalent to 2,000 cases in a city with a population of a million. Not infrequently small villages may have five, seven or eight cases of sickness caused by infected milk. Proportionately this would be an empidemic of untold magnitude in a metropolitan city."

THE LEISURE HOUR.

HISTORY, PHILOSOPHY, FICTION, HUMOR, SATIRE, POETRY.

LEISURE HOUR WAS FOUNDED IN THE BELIEF THAT THE PHYSICIAN IS BUT HUMAN; THAT HE LOVES THE BEAUTIFUL IN THOUGHT AND SENTIMENT AS EXPRESSED IN LITERATURE, AND THAT HE IS AT TIMES SURFEITED WITH TECHNICAL MATTER. SHORT, CRISP CONTRIBUTIONS ON ANY OF THE SUBJECTS NAMED IN THE SUB-HEADING ARE INVITED TO THIS DEPARTMENT.

COLD WATER COFFEE INFUSION.

THE three important ingredients of coffee are caffeine, tannin and essential oils. Caffeine, the active principle of coffee, exists as a latent element in the bean; it is a white powder, with a bitter taste and an acid reaction. At 77 degrees F. it is soluble in one-ninth the extent of its solution in hot water (175 degrees to 212 degrees F.); its solubility is increased in water containing cerium, and potassium and sodium salts (the latter being the hard water found in springs and wells).

Caffeine alone, when given as a medicine, often results in headaches and sometimes in mild derangements of hearing and eyesight—noises in the ear and flashes of light. In the form of caffeine citrate it is used to relieve headaches, though in some susceptible people such headaches are increased. The absorption of caffeine from coffee into the system is followed by increased mental action, oftentimes exhilaration so marked that sleep is interfered with; and if taken to excess, as in the case of any stimulant, the period of depression which a great many of our fellow citizens experience supervenes. Caffeine may excite the muscles, producing tremors and irregular muscular action, and may interfere with equable circulation throughout the whole body.

Tannin, or tannic acid, is only slightly soluble in cold water, but very soluble in boiling water; the resulting solution is acid, for blue litmus paper will turn pink in it. Tannin is fairly well distributed in the vegetable kingdom; it is found both in coffee and in tea; ink results when it is added to iron solutions—and that is just what many a housewife drinks when she keeps her iron teapot standing for any length of time. Tannin when swallowed is astringent to the mouth, throat and gullet, and it gives a disagreeable, oppressed sensation to the stomach. Pure it is a yellow powder. It is used in medicine as an astringent—to relieve hemorrhages and to check diarrhoea. In the stomach tannin combines with any proteid substance there present, precipitating it before the acid gastric juice has been formed. But as digestion progresses this combination is broken up, for peptones will not combine with tannin in acid solution during the second stage of stomach digestion; the astringent action is therefore expended on the walls of the stomach and intestines. Such irritation may induce nausea and perhaps vomiting. Among other bad effects of tannin are a diminution of the normal secretion of the glands.

The volatile oils stimulate the interior of the stomach and thus favor digestion; it is they which give to our breakfast cup of coffee its delicious and soul-satisfying aroma, especially when this beverage of the gods is piping hot. These aromatic oils, unlike the caffeine and the tannin are readily absorbed by cold water.

The coffee bean contains about two-thirds of one per cent. of caffeine; the roasting does not seem to reduce this percentage; so that, since almost all the caffeine is extracted in the ordinary hot culinary process one cup contains from one and one-half to three grains of caffeine (one grain is a minimum, and two grains a fairly strong medicinal dose of caffeine). The wakefulness and the relief from fatigue and the muscular tremors produced by coffee are undoubtedly due

to the caffeine; on the other hand, the feeling of well-being and comfort produced by coffee after a full meal is mostly due to the local action of the volatile oils in the stomach. The same result is produced by preparations of other volatile oils, such as are oftentimes added to coffee in the form of brandy and liqueur. Apart from this local action the volatile parts of coffee seem to have no other effects on the body.

It used to be considered that coffee lessened tissue changes in the body, and that it ought therefore to be included among the foods; it has since been proved that, far from lessening metabolism (the healthy interchange of tissue) coffee increases it, as evidenced by the increase in the excretion of urea and carbonic acid. This is naturally to be expected from the increased activity of the nervous system occasioned by this beverage; like all stimulants, it makes in the end, not for building up, but for wear and tear.

Obviously then, if we are to be benefited and not harmed, we should, under ordinary circumstances eliminate caffeine and tannin from our coffee drinking as far as possible; although for special reasons, when brain and muscular stimulation are desired—and here the wise man will go slow—caffeine may be desirable. And we should take our coffee with food, and not on a fasting stomach. Taken during or after a meal, coffee benefits digestion.

The obvious deduction from these observations is that hot or boiling water should be avoided in making coffee, if we are not to suffer bad results; an infusion should be made with cold water, since in this way one-ninth the caffeine and one-fifth the tannin is extracted, whilst the aroma of the volatile oils is preserved. A concentrated infusion is made; and just before we want coffee we add hot water, hot milk or hot cream (all heated to the boiling point); and a delicious and fragrant cup will be forth coming.

Dr. Robert Amory told in the *Boston Medical and Surgical Journal* just how we are to proceed: The bean must have been well roasted; and in the roasting have been continually agitated for the removal of loose particles of its envelope, pains being taken to heat thoroughly its interior. Thus roasted it is ground rapidly, to a fine impalpable powder; for the heat from rapid friction will excite the evolution of the volatile oils. This grinding should be done immediately before preparing the extract; if the ground coffee stands in the air the volatile oils will evaporate. Place now the ground powder in the upper part of a china or porcelain percolator, such as the Austrian coffee biggin, leaving off the cover and the small saucer; put in a lump of ice and pour on cold water from a water tap (not well or spring water), and let the ice cold water drip through the ground coffee, stirring the mixture carefully and thoroughly into a paste-like mass. To facilitate the percolation of the infused watery extract it is advisable to place a small piece of wood between the lower edge of the receiver which contains the coffee grounds and the upper part of the vessel which receives the infusion, as this leaves a little air space between these parts. When the liquid coffee infusion has all dripped through the percolator, pour back through the wet grounds all the liquid from the bottom receiver and allow the percolation to go through the same process as before, replenishing the ice, if necessary. Now put the lower portion of the biggin in a cool place, and put on the cover. We shall, unless too much water is used in the percolation, have a very strong extract; and this is desirable, because in preparing it for the cup we want to add sufficient boiling water to reduce to the required strength. The boiling water will set free the volatile oils which give the heaven-sent flavor.

Don't use a metal biggin or percolator; for the vegetable matter suspended in the liquid infusion will collect in the angles of the bottom receiver and rapidly become the center of decomposition; thus will germs develop which will destroy the suspended particles left in the infusion, the particles containing the agreeable taste of the coffee. Clean china or glass will not collect these micro-organisms to any positive degree, especially when the infusion is kept in a cool place.

Dr. Amory carried such infusions as are here described on trips for three weeks at a time, during which they have lost neither color, strength nor aroma, when kept carefully corked in a cool place. And he assured those who would try his recipe, which he used for eight years, that they will never again make boiled coffee for drinking purposes. He got the tip originally from reading a statement that Col. Younghusband took cold-water infusions of coffee with him during his long journeys into the Thibetan wilds, with most satisfactory results for all the English party.

GET WHAT YOU WANT WHEN YOU WANT IT.

EVERY housewife in New York can buy groceries by weight if she wants to—a pound of fresh eggs (a bad egg is lighter than a good one) or a pound of molasses; there is a State law to justify her request. It is ignorance of this law on the part of both housewives and tradesmen that has moved the Metropolitan Bureau of Weights and Measures to undertake an educational campaign. Commissioner Joseph Hartigan, of this Bureau, has engaged five women inspectors after civil service examination, and hopes eventually to have fifteen in his employ. Their duty is to go into markets and make inspections. They may disguise themselves so as to resemble more closely the women of the particular district in which they are visiting. If the grocer attempts to sell them a chicken for three cents more than he ought to, thinking they will not understand the workings of his computing scales, he finds to his sorrow that he has tried to cheat an inspector unawares.

On the opening of school the coming fall these women inspectors will teach the children such facts as the purchasing public ought to know. Oftentimes parents are best reached through the children, and if the latter are brought up to demand fair measures and to buy intelligently it will do much in time, considers Commissioner Hartigan, to do away with the high-cost-of-living problem.

The Housewives' League is doing superb work in educating womenfolk to realize their responsibility as purchasers. If they can be taught to insist on fair dealing, if they can be made to feel that the question of marketing is a very important one, and that their intelligence in making their individual purchases has its effect on the rest of the community, it will do much to bring about a better standard in trade.

The Bureau of Weights and Measures has compiled the following list of "don'ts" for purchasers:

"DON'TS" FOR PURCHASERS.

"Don't be afraid of your tradesman. If you believe he is giving you short weight, or not the proper quality of goods, do not hesitate to insist upon your rights.

"Don't leave your shopping till the last minute and then be in a hurry. It is frequently when a customer is in a great hurry that the dishonest merchant takes advantage of her.

"Don't allow your grocer or dairyman to weigh in the wooden butter dish when he is weighing your butter. These butter dishes frequently weigh, in accordance with their size, from an ounce to three ounces. You will observe some of them very prettily decorated with tin on the edge. Remember, if they weigh these in, they are selling you the tin and the wood at the price of butter.

"Don't buy in a careless manner. That is, always ask for whatever the commodity is by a known weight or measure. Avoid asking for a cupful, five cents' worth, or ten cents' worth, a package, a handful, a glass, a jar, a bag, a basket, a bucket or a tub. All of these terms mean nothing in the law; unless you say a pound or a quart, or a gallon, or whatever amount you want.

"Don't be afraid to carry a bundle, unless you are prepared and willing to stand the expense of having it delivered to your home. A great many bakers who will willingly deliver your bread to your house are delivering you a lighter loaf than the same character of a loaf purchased from the counter and carried home by you. The same is true of a great many other merchants. Somebody has to pay the expense of a horse and wagon. If you are willing to share this expense, well and good, but realize that you are doing it if you have your products sent home."

LABOUR rids of three great evils—irksomeness, vice, and poverty.—VOLTAIRE.

A MIRACLE is an act of natural law not previously understood.

REAL LITERATURE.

THE following editorial in *The New York Times* is reprinted as a piece of superb literature. It is based altogether on fact on the course pursued by the German transatlantic passenger steamer *Cecilie* to evade capture by English or French war vessels, Bar Harbor having been the port of refuge:

THE FLYING TREASURE.

Strange to what absurd extremes novelists will resort in their efforts at sensation. Here, now, is one who violates every rule of common sense in an attempt to concoct a more bizarre yarn than any of his predecessors. He tells us that a great liner started one day from New York to Bremen in the same commonplace way in which she had started so many times before, carrying tourists, sightseers, health-seekers; but in addition she was a treasure ship, carrying nearly $11,000,000 in gold consigned to European bankers. After three days the moon suddenly shifted from starboard to port, and while the passengers were marveling at the phenomenon the Captain informed them that the nations of the world were at war, that he had been notified by wireless, and that he was fleeing back, not to New York, but to any port into which he could escape unobserved.

So for days, the author tells us, this twentieth-century liner repeated the experience of a Spanish treasure galleon, dodging and turning along the sea lanes to hide from DRAKE or RALEIGH or from the pouncing buccaneers. She was disguised, veiled in canvas, and stole through the darkness without so much as a candlelight showing. More than half way to Europe, she had turned, and now she prowled along backward, the sea alive to her passengers' imagination—and perhaps in fact—with cruisers hunting for her and the wealth she bore. Through the fog she sped at high speed, dark and unseen, her passengers prisoners on her masked decks, no man knowing her destination, no man knowing when a shot across her bows would mean that the game of hide-and-seek was up.

Meanwhile the whole world was watching for her, speculating on her fate; she was reported in one quarter, then in another; she had landed here, she had landed there, she had been captured. That nothing might be omitted to make the story less possible in the prosaic twentieth century, the novelist who conceived this daring fiction placed on board her a group of American financiers, and made them offer to the Captain to buy the treasure ship and sail her under American colors. Finally, to cap the climax, he makes his fleeing liner with its cargo of gold, its passenger list of financiers, and its Captain who is an officer in one of the warring navies, turn up—where, of all places in the world? Why, in the harbor of a Summer resort, to be greeted by the tangoing, tennis-playing population of Summer butterflies flocking down to the shore to see the unprecedented sight, wondering what liner had gone crazy and left its course, and then discovering that it was the ship for which all the world was looking. No, it will not do; the novelist shows promise, but he must restrain his imagination if he is to make his mark in literature.

THE WISE MAN.

There was a man in our town
  And he was wondrous wise,
He filled his store with tanglefoot,
  And slaughtered all the flies;
And when he found the flies were dead,
  With all his might and main
He tackled germs and weevils then
  Till all the "bugs" were slain.

Sanitary counters showed his class.
  They keep his goods so clean
That all the women in the town
  Now in that store are seen;
He dressed his clerks in snowy white
  And made them clean their nails
And now he has of wealth so much
  He stacks the stuff in bales.

—*Bull. So. Dakota Food and Drug Dept.*

THE PRACTICAL MAN.

At this moment, at any moment several million men are saying to several million other men: "You're a theorist." I have had it said to me so often that I'm beginning to wonder whether there aren't really four sexes in America, men, women, practical persons, and theorists. This at least is certain, there is one sure way to reveal your theorism: ask a practical man what he means by the word practical. He will begin by looking at you with a black despair, as if you had asked him whether two and two really make four. He will consider your question unnecessary and insulting, and he will demonstrate his opinion of you by disdaining to give a satisfactory answer. There is good reason for that: if a practical man defined "practical," he would in that very moment become a theorist.

For a theorist is nothing but a man who tries to think about what he's doing; not satisfied with being on his way, he wishes to know where he's going. Moreover, he's not content to go anywhere at all or nowhere in particular.

"There is only one way to find out what "practical" means—watch what practical men do. That is fairly simple in America. The great mass of them govern this country, its industries, its life and its labor.

And:—

In a world of practical men, thousands of babies are badly born, and thousands die of starvation, bad air and inattention.

In a world of practical men, hundreds of thousands receive no education worth the name. There aren't even enough school buildings for children, let alone teachers, let along competent teachers.

In a world of practical men, hundreds of little children are prepared for their lifework in sweatshops and factories. I will not insist here on the fantastic notion that every child should be happy.

In a world of practical men, hundreds of thousands of mothers devote themselves to the establishment of homes by working all day in factories and stores. This is the practical way of promoting the efficiency of the next generation. There are also hundreds of thousands of mothers who are enabled to teach their children frugality and perseverance by turning the parlor into a workshop.

In a world of practical men, thousands die of overwork, or starve for lack of work.

In a world of practical men, there are half a million people in lunatic asylums.

In a world of practical men, the jails are crowded.

In a world of practical men, immense quantities of food are poisoned.

In a world of practical men, politics is bought and sold.

In a world of practical men, the cost of living is exorbitant.

In a world of practical men, infants and idiots can inherit millions.

In a world of practical men, natural resources are wasted.

In a world of practical men, nations go to war.

In a world of practical men, there is a panic about once every ten years.

In a world of practical men, the strike and the lockout, the boycott and the blacklist are in constant use.

In a world of practical men, thought is hired, news is manufactured.

In a world of practical men, some are too poor and some are too rich.

And above all, in a world of practical men, no remedies are proposed. That is the monopoly of theorists. If they might say a word to the practical men, it would, I think, be this:

"Gentlemen, as the ruler of a nation, your success is not conspicuous. As we go among men, we find your prestige very much diminished. To be quite frank, we don't admire you enormously. We don't think your eyes and ears are open wide enough to have learnt the real feelings of this nation. We theorists offer you one hint, take it or leave is: you are sitting an a pile of gunpowder, smoking a cigar.—Walter Lippman in *Everybody's Magazine.*

WHICH WOULD YOU PREFER?

Smallpox.

A virulent virus from a previous case.

The disease: Sharp chills, fever, severe headache and backache, nausea, vomiting, eruption, like to spread so that the whole body is bathed in nauseous pus.

The result: Death in one case out of four or five in severe epidemics. Disfigurement for life in many more cases.

Vaccination.

Lymph from a selected healthy calf obtained under careful precautions, purified and tested to prove no foreign infection is present.

Vaccinia: Slight local soreness; feverishness and irritability.

Immunity against smallpox.

Directions for Vaccination.

HOW to be vaccinated. Before vaccination, a bath should be taken and clean underclothes should be put on. The site of vaccination in particular should be thoroughly cleansed. Cleanliness is absolutely necessary. The part of the arm where the vaccination is made should be washed with alcohol, or with soap and warm water; don't use any antiseptic like carbolic acid or bichloride solution. The skin is scratched slightly by the physician with a sterilized needle which is thrown away after use on the individual. The vaccine which is kept in pure condition is then rubbed in and allowed to dry.

WHAT to do after vaccination. The local effect of vaccination reaches its height at about the tenth day. On the eleventh day the soreness decreases and the contents of the sore begins to dry. At the end of two weeks a scab forms. After three weeks the scab falls off and leaves a clean circular scar.

No ointment or grease should be applied to the vaccination, and tight shields are not desirable.

The vaccination should be covered throughout the entire period with a freshly washed handkerchief pinned to the sleeve of the shirt, or with a piece of sterilized cotton gauze. This covering should be changed daily.

Only clean boiled water should touch the arm. Above all, dirt should be kept from the vaccination wound. Any unfavorable result follows from scratching with dirty fingers, which introduces infection from outside, rather than from the vaccination itself. If the vaccination is accidentally injured or becomes dirty the family doctor should be consulted promptly. These rules for vaccination are adapted from those given by the *New York State Department of Health.*

HOW TO SELECT YOUR FAMILY DOCTOR.

The following question and answer appeared in Dr. Evan's *How to Keep Well* column in the *Chicago Tribune*:

Some time ago I saw an article in your columns saying that as long as people would patronize an incompetent physician, simply because of his genial manner, they would have themselves to thank for their misfortunes. As far as I can see, the ordinary layman is in no position to judge a phyisican, and no one in a position to judge will commit himself further than to say that so-and-so is a recognized specialist in his line. How is the layman to judge a general practitioner?

Dr. Evans answered:

By the judgment and sense he shows in the ordinary affairs of life; by his attendance at hospitals, medical society meetings; by his standing with other physicians; by the books and journal he reads; by his knowledge of medicine, medical judgment and skill. Some of these items are get-at-able in every case, and all of them in some cases. At the present time the opportunities for popular education on medical subjects are so abundant that the ordinary layman should be able to judge fairly well between the physician who knows his business and the bluffing ignoramu.

THE THREE PROFESSIONS.

THE lawyers are the cleverest men, the ministers are the most learned, and the doctors are the most sensible.

The lawyers are a picked lot, first scholars, and the like, but their business is as unsympathetic as Jack Ketch's. There is nothing humanizing in their relations with their fellow creatures. They go for the side that retains them; they defend the man they know to be a rogue, and not very rarely throw suspicion on the man they know to be innocent. Mind you, I am not finding fault with them—any side of a case has the right to the best statement it admits of, but I say it doesn't tend to make them sympathetic.

Suppose, in the case of Fever vs. Patient, the doctor should side with either party according to whether the old miser or his expectant heir was his employer. Suppose the minister should side with the Lord or the devil according to the salary offered, and other incidental advantages, where the soul of the sinner was in question. You can see what a piece of work it would make of their sympathies.

But the lawyers are quicker witted than either of the other professions and other men generally. They are good-natured; or, if they quarrel, their quarrels are above board. They are apt to talk law in mixed company and they have a way of looking round when they make a point that is mighty aggravating.

The ministers come next in point of interest. They are interesting men, full of good feeling, hard workers, always foremost in good works, and on the whole the most efficient civilizing class—working downward from knowledge to ignorance—that we have. The trouble is that so many work in harness. They feed us on canned meats mostly; they cripple our instincts and reason and give us a crust of doctrine. They used to lead the intelligence of their parishes; now they do pretty well if they keep up with it, and they are very apt to lag behind it.

Then they must have a colleague. The old minister thinks he can hold to his old course, sailing right into the wind's eye of human nature as straight as that famous old skipper, John Bunyan. The young minister falls off three or four points and catches the breeze that left the old man's sails all shivering. By and by the congregation will get ahead of him, and then it must have another new skipper. The minister is coming down, every generation, nearer and nearer to the common level of the useful citizen—no oracle knows it all, but a man of more than average moral instincts who, if he knows anything, knows how little he knows.

The ministers are good talkers, only the struggle between nature and grace makes some of 'em a little awkward occasionally. The women do their best to spoil them, as they do the poets. Now and then one of 'em goes over the dam. No wonder! They're always in the rapids.

The doctors have not half the general culture of the lawyer nor a quarter of that of the ministers. I rather think, though, that they are more agreeable to the common run of people than the men with black coats or the men with green bags. People can swear before 'em if they want to, and they can't very well before ministers. I don't care whether they want to swear or not—they don't want to be on their good behavior. Besides the minister has a little smack of the sexton about him. He comes when people are "in extremis," but they don't send for him every time they make a slight moral slip—tell a lie, for instance, or smuggle a silk dress through the custom house. But they call in the doctor when the child is cutting a tooth or gets a splinter in its finger.

So it doesn't mean much to send for him, only a pleasant chat about the news of the day. For putting the baby to rights doesn't take long. Besides, everybody doesn't like to talk about the next world. People are modest in their desires. But everybody loves to talk physic. Everybody loves to hear of strange cases; people are eager to tell the doctor of the wonderful cures they have heard of. They want to know what is the matter with somebody or other who is said to be suffering from a "complication of diseases," and, above all, to get a good hard name, Greek or Latin, for some complaint which sounds altogether too commonplace in plain English.

If you will only call a headache a cephalalgia it acquires dignity at once and a patient becomes rather proud of it.

So I think doctors are generally welcome in most companies.—*Oliver Wendell Holmes.*

CORRESPONDENCE.

April 10, 1914.

EDITOR, DIETETIC AND HYGIENIC GAZETTE,
87 Nassau Street,
New York City.

Dear Sir:—

I was interested in reading in your March issue Doctor J. B. Huber's article with the caption "Nothing But a Cold." The article is written very intelligently and the advice is certainly well worth following. The Doctor says in part:

"Nevertheless consumption, the Captain of the Men of Death, holds the greatest record for human suffering and human fatality."

Several years ago this statement was correct. Mortality statistics show that the death rate from tuberculosis is gradually decreasing, while the death rate from diseases of the circulatory system and genito urinary system is rapidly increasing.

In the *New York Medical Journal* of July 12, 1913, there is the following:

"LONGEVITY AND REJUVENESCENCE.—BY NASCHER.

"According to the 1910 report of the field secretary of the Provident Life Assurance Society of England, the death rate from diseases of the heart, kidneys and circulatory system, including apoplexy, has increased 105 per cent. in the United States since 1880, while in England the increase in deaths from these diseases during this period was only three per cent."

The cause of this increased mortality from heart and kidney diseases is undoubtedly due to errors in our dietary. It has been demonstrated that the daily average consumption of salt in the United States is 300 grains, whereas but 15 grains are utilized by the system, thus leaving 285 grains of a mineral substance to be excreted principally through the kidneys. The elimination of this amount of a mineral substance undoubtedly injures the kidneys and the medical fraternity are fast learning this fact as they are now advocating a salt-free diet for all diseases of the circulatory system, genito-urinary system and digestive system; also in diseases of the respiratory system.

There is a cause for this increased mortality from the above mentioned diseases and the sooner the cause can be located the sooner will the span of life be lengthened. If the exclusion of salt from the dietary is beneficial when some of our organs are deranged, is it unreasonable to suppose that the exclusion of salt from the dietary of the well would prevent the heart and kidneys from becoming diseased? It need not be necessary to exclude all salt, as the system requires 15 grains. It would be difficult, however, to educate the public to realize the deleterious effect of chloride of sodium, which has been used, one might say, since the world began.

Yours very truly,
H. L. HARRIS,
100 William Street,
New York City.

THE PUNISHMENT FIT THE CRIME.

IN the year 1481 Jacques de Tourzel, Sieur d'Alegree decreed the following punishments for adulteration and other sins against pure food.

"Any man or woman who sells watered milk shall have a funnel thrust into his or her mouth and be compelled to drink as much watered milk as in the judgment of the surgeon can be borne without danger to life. Any man or women who sells butter mixed with beets, stones, or other objects with the object of increasing the weight, shall be arrested and put in our pillory. Then the butter shall be placed upon his or her head and there remain until it shall have been melted by the heat of the sun. The dogs shall be allowed to lick them, and the people may scold them with any words its pleases them, provided that neither God, the King, nor any other persons be thereby libeled. If the weather is cold a fire shall be built in front of the guilty one. Any man or woman who sells rotten eggs shall be bound to the pillory and the street urchins shall be given the rotten eggs, that they may therewith pelt the offender, to the amusement of the people, but it shall be forbidden to throw at them any other object than rotten eggs."

SUPERLATIVE POETRY.

HOW SLEEP THE BRAVE.

How sleep the brave, who sink to rest
By all their country's wishes blest!
When Spring, with dewy fingers cold,
Returns to deck their hallow'd mould,
She there shall dress a sweeter sod
Than Fancy's feet have ever trod.

By fairy hands their knell is rung;
By forms unseen their dirge is sung;
There Honour comes, a pilgrim grey,
To bless the turf that wraps their clay;
And Freedom shall awhile repair
To dwell, a weeping hermit, there!

—*William Collins.*

NEW WARS FOR OLD.

By Alfred Noyes.

I.

Peace! When have we prayed for peace?
Over us burns a star
Bright, beautiful, red for strife!
Yours are only the drum and the fife
And the golden braid and the surface of life!
Ours is the white-hot war!

II.

Peace? When have we prayed for peace?
Ours are the weapons of men!
Time changes the face of the world!
Therefore your ancient flags are furled,
And ours are the unseen legions hurled
Up to the heights again!

III.

Peace? When have we prayed for peace?
Is there no wrong to right?
Wrong crying to God on high
Here where the weak and the helpless die,
And the homeless hordes of the city go by,
The ranks are rallied to-night!

IV.

Peace? When have we prayed for peace?
Are ye so dazed with words?
Earth, heaven, shall pass away
Ere for your passionless peace we pray!
Are ye deaf to the trumpets that call us to-day,
Blind to the blazing swords?

—*From Collected Poems, Frederick A. Stokes Co.*

THE PANGS OF VICTORY.

Unswerving lance or falchion sure.
With hardihood I meet;
But help me, Heaven, to endure
Their death whom I defeat!

Richard Kirk, Harper's Weekly

SONG.

Think of nothing but the day:
Yesterday is dead and gone,
And to-morrow will not stay
Longer than another one.

Why should time, that cannot mar
One triumphant rose's scent.
Stint our joys, because they are
Blossoms, fair not permanent?

Any joy like any flower
Has its instant blossoming:
How can even time have power
Over either perfect thing?

From Arthur Symons's 'Knave of Hearts' (*Lane*).

"SCIENCE AND ROMANCE."

By "W. de H. R." *in the Contemporary Review.*

They strive to bind in words the winds' wild race,
In words to curb the salt waves' made career;
The stars that disperse night's opal face,
And all the world's strange music that I hear,

Are but to them as to the Roman seer,
Whose madness sought the nature of each thing,
Robbing the elements of all their fear,
Yet stilling Fancy that erstwhile did sing.

To them the Winter brings no weeping world,
No tremor ushers in the Spring's new birth,
The gaunt, brown leaves by wild October hurled
Mean not to them the sorrows of the Earth—

Still shall *I* hear the song of flowers to be,
And catch the myriad voices of the sea.

NUGGETS.

From The Survivor by E. Philips Oppenheim.

"There are so many things," he said, speaking softly and half to himself. "Last week, Cicely, I took a compass and a stick and I walked across the hills to Rydal Mount, where Wordsworth lived. When I came back I think I was quite content to spend all my days here. It is such a beautiful world. Some day when you have lived here longer, you will know what I mean—the bondage will fall on you too. The mountains with their tops hidden in soft blue mist, the winds blowing across the waste places, the wild flowers springing up in unexpected corners, the little streams tearing down the hillside to flow smoothly like a belt of blue ribbon through the pasture land below. The love which comes for these things is a strange, haunting thing. You cannot escape from it. It is a sort of bondage. The winds seem to tune themselves to your thoughts; the sunlight laughs away your depression. Listen! Do you hear the sheep-bells from behind the hills there? Isn't that music? Then the twilight and the darkness! If you are on the hilltop they seem to steal down like a world of soothing shadows. Everything that is dreary and sad seems to die away; everywhere is a beautiful effortless peace. Cicely, I came back from that tramp and I felt content with my lot, content to live among these country folk, speak to them simply once a week of the God of mysteries, and spend my days wandering about this little corner of the world beautiful."

Two hours later he walked out into the cool night air a new man, with head erect, his brain clear, swept clean of many sickly phantoms. His virility was renewed, he looked out once more upon life with eyes militant and brave heart. He was full of the sense of having passed through some purging and beneficent experience. It was not that his religious belief or disbeliefs had been affected, or even quickened by anything he had heard—yet, from first to last, those two hours had been full of delight to him. The vast, dimly lit building, with its imposing array of statuary, shadowy figures of great statesmen, soldiers, and priests seen by him then, as it chanced, for the first time, woke him at once from his lethargy. Religion seemed brought in a single moment into touch with the great things of life. There were men there who had been creedless, but great; genius was honored side by side with sanctity. The rolling music, the pure, fresh voices of the boys appealed to his sense of the beautiful, as those historical associations awakened his ambition. The white-robed priest, who stood in the centre of the great building yet whose voice without effort seemed able to penetrate to its furthest corner seemed both in his personal self and in his scholarly diction exquisitely in accord with his great surroundings. Without a manuscript, with scarcely a note, he stood there, calm and imposing, the prototype of the modern priest, pleading against worldliness for the sake of beauty and of God. With delicately chosen words and exquisite imagery, the calm enthusiasm of the orator, always self controlled and sweetly convincing, seemed to Douglas like the transmutation of a beautiful picture into a beautiful poem, instinct with life, vivid and thrilling. He stayed till the sermon was over and the solemn words of the benediction pronounced, till the deep, throbbing notes of the organ rang down the emptying aisles. Then he walked out into the streets a saner and a better man.

"You keep a joint bank account with your wife, do you not?" "Yes, I deposit the money and she draws it out."—*Boston Transcript.*

"When you proposed to her, why didn't you tell her you were unworthy of her? That always makes a hit."

"I was going to, but she told me first."

Terrible though it may be to have to say it, a man's worst punishment in England only begins after he has left prison.

"If you have an idea, cage it. Ideas have the wings of the morning and may take eternal flight unto more responsive territory."

"The mills of the gods never shut down on account of a strike."

NURSING DEPARTMENT.

EDITED BY FRANKLIN W. BARROWS, M.D.

THOUGH WIDELY DIFFERING IN FUNCTION, THE ULTIMATE AIM OF THE NURSE IS THE SAME AS THAT OF THE PHYSICIAN, THE RELIEF OF SUFFERING AND THE SAVING OF LIFE. CULTURE, HELPFUL INFORMATION AND A BETTER UNDERSTANDING OF RELATIONS, LEADING TO AN INTELLIGENT CO-OPERATION IN THIS COMMON AIM, ARE THE OBJECTS OF THIS DEPARTMENT.

GETTING OUT OF THE RUT.

We lose vigor through thinking continually the same set of thoughts. New thought is new life.—Emerson.

A NURSE in a recent convention made telling use of the complaint of a certain critic that our present system of nursing education is no system at all. It speaks well for our nursing organizations that they had the patience to listen to such a criticism and to entertain the thought in their minds. A wholesome discontent with our present order of things is our strongest guaranty of a better future. Those schools that are satisfied with things as they are to-day will be in the rear of the procession to-morrow. Our intellectual activity can almost be measured by the public interest in better educational methods. The public schools are subjected to a continuous fire of criticism which is equalled only by the activity of educational experts in devising improvements to satisfy the critics as well as the friends of the schools. The application of this idea to professional education is well stated by Dr. John L. Heffron, of Syracuse, N. Y., who says: "Education is in flux. It is never stable. What seems a truth to-day may to-morrow be revealed as but a half truth. We grasp what is in sight to secure what is better beyond and we advance by such methods. The ideal is always just ahead and woe is he who believes that he has attained it for to such there is no ideal."

Let us then take heart when the critics do us the honor to notice the faults of our present systems of nurse training. Improvement is bound to be the result.

We are using these words as an introduction to the editorial by Miss Annette Fiske which we reprint in full from the *News Letter*. The principle which she defends so well is not new in itself because it has been applied for years, with great success, in more than one training school. It will be a new idea, however, when it is introduced as a modification of the course in schools that have long stood out against it. And we predict that this very thing is about to happen sometime and somewhere, and that it is one of the changes that will put new life into the training of nurses and make them fit for work which is to-day all but impossible for many graduates from some of our most pretentious "training schools"—schools which do *not* train for the business that the nurse has to do after graduation.

"Resolved that the Executive of the Graduate Nurses' Association of Ontario disapproves of pupil nurses being sent out by the hospitals to do private nursing during their training as it is unfair to the pupils themselves, and also to the graduate nurses." This statement appears in a letter printed in the *Canadian Nurse* for May. Later on, in the editorial, a similar stand is taken on the subject of the sending of pupil nurses into homes. Thus it is stated that "Pupil nurses should not be exploited by hospitals to replenish their treasuries. These young women go to these hospitals in all good faith, for the education and training that will fit them to be worthy members of the nursing profession. Are they getting this education and this training when they are thus sent out away from supervision? We think not." Together these statements form about as satisfactory an exposition of the views of those opposing the sending out of pupil nurses to the home as one meets with and it may be well to consider how much it amounts to and how much truth there is in it. There is one point, however, which should first be noted. If the pupils who are sent out are really "sent out away from supervision," that is undoubtedly wrong. Pupil nurses should be under supervision all the time or they cease to be pupils for the time being. Granted, however, that their work in the home is supervised, is it true that their being sent out is unfair to them and to the graduate nurse?

Take the case of the pupil nurse herself. She comes to the training school, as has been said, for the education and training that will fit her to be a worthy member of the nursing profession. After graduation what branch of nursing is she, in common with the majority of nurses, most likely to take up? Private nursing, is she not? And what better preparation could she have for private nursing than nursing in the home under supervision while still a pupil? One frequently sees

the statement that the private nurse is not worth so much the first year after graduation because she has to learn to adapt herself to new nursing conditions. Why not learn these conditions, then, and how to work in them before graduation, instead of after one is supposed to be a fully competent nurse? It would seem to be better for the nurse and better for the patient also that she should do so. Besides, when sent out on case work, the student nurse not only learns to make good in the branch of nursing she is to follow later, but she gets acquainted with families and doctors who, if they like her work, will employ her later on. It would seem, therefore, to be distinctly to her advantage.

As for the home work of the pupil nurse being unfair to the graduate, it has been shown how case work as an undergraduate often brings case work as a graduate. Aside from this, however, it speaks very badly for the fully trained nurse if she cannot hold her own in competition with those partially trained. The lower price charged would not compensate for poorer service and people would take the better nurse if they could pay the price. If people who can afford graduate service prefer to have undergraduate service, it must be because the undergraduate nurse makes herself more agreeable or more useful. If they do not prefer it, no injury is done to the graduate. If they employ the undergraduate because they cannot afford the graduate, the fact that the undergraduate was not sent out would not make them any better able to pay the higher price. Any graduate who knows her work and makes herself agreeable in the home need not fear the competition of pupil nurses where people can afford her prices.

ARE WE DIRTY BY NATURE, OR JUST THOUGHTLESS?

A Little fellow had "barked his shins" in an accident on the playground and was receiving some necessary but painful attention at the hand of the school nurse. After bravely suppressing a howl or two he looked up to his benefactress and tearfully remarked, "If I was a dog I cud lick them sores *well.*" If it had been his thumb, of course he would have had it in his mouth, just like a boy.

We can't blame the children when their mothers persist in setting a bad example. Many mothers who ought to know better will moisten their nipples with saliva before offering them to their long suffering babes; and if they use a nursing bottle, of course they have to taste the milk before they can give the infants a chance. Is this nature or perversity? They are no worse than the ignorant midwife who bathes the baby's eyes with her own saliva "just to wash away the sleepy dust,"—and then forfeits her "diploma." By the way, who does not remember some really "intelligent" mothers who, in times of stress, have been known to "clean up" a dirty child's face with a corner of the towel moistened frequently in their own mouths, thus literally "licking the child into shape." Perhaps there is "company" waiting in the front room and no time to hunt up the "wash dish" and do things up in style.

One evening we stood at the public writing desk in a large post-office. A very warm woman was perspiring in the effort to scrawl a letter with a lead pencil. It was a great undertaking for her, and she suddenly discovered that she had made a bad mistake, "got mixed," and would have to erase a line or two. "Has any of youse got a pencil with a rubber onto it?" she asked in plaintive tones. A man standing near thrust a very dirty hand—which had been holding his cigar stub—into his pocket and produced an eraser which he gallantly brought to the rescue. For some reason it didn't take hold very well and the man said, "Just moisten it well with saliva." Into the woman's mouth it went very promptly and she had no more trouble with her corrections. The rubber was restored to its accommodating owner with a hearty "Thanks."

Some ladies would criticise such a performance—and then hold a coin or two in the mouth while fumbling around for the purse, just a little change passed to them by a newsboy or a conductor. People whose intelligence will not allow them to "stand for" such a piece of carelessness will save the twine from all sorts of bundles and when they use it again invariably insert one end in their mouths, just like the other person who used it last. And so they go on through the world, sticking their fingers in their mouths while they turn the leaves of old books—or mayhap new ones—old bills, or draw a pair of dirty gloves on their hands; using their mouths to hold pins, clothes-pins, street-car transfers, untie knots, and kiss all babies within their radius.

We think we have done our whole duty when we urge this sort of people to abolish the common towel and drinking cup. We will have to start a long way back of the towel and the cup if we mean business in

our sanitary reformation. By the way, we made some amusing observations on the virtues of the individual cup as we were traveling through the good state of Ohio on a recent very warm day. There was a family party which took up about three seats in the railway coach. They all became thirsty at once and sent one of the restless boys to the water tank. He filled a paper cup and brought it back to his kinfolks who sipped the ice water, *seriatim,* until every one had a good taste; then the cup was refilled twice and every one took a turn or two more at it. What that "individual cup" did for that coach full of passengers was simply to limit the contagion to that one family. It was a good thing!

No wonder our national tendency to be miscellaneous manifests itself outside the sacred precincts of the home, as well as inside. A "sanitary crank" in Indiana relates in the board of Health's *Monthly Bulletin* a few things that he has seen on his travels. We will repeat some of them, although they don't sound "nice," and we would observe that our readers can see similar sights themselves without going to Indiana.

I have seen a waiter wipe his sweaty forehead with the towel he carried on his arm for wiping dishes.

I have seen knives, forks and spoons, which had been used a short time before, simply wiped on a not too clean tea-towel without even dipping them in water.

I have seen tumblers, after having been used at table, simply wiped with a not too clean tea-towel without even dipping them in water.

I have seen knives, forks, spoons and tumblers, after use at table, rinsed in greasy, yellowish dish water and then wiped with a tea-towel which was an approach to rubber roofing in color.

I have seen restaurant kitchen help pass hands through hair and then handle sliced bread.

I have seen two mice jump out of a bread box and the sliced bread therein sent to the table as if nothing had happened to it.

I have seen a waiter pick two flies out of a glass of milk with his fingers and then place it on a table to be drank by a child.

I have seen a basket of lettuce sitting on the floor in a restaurant kitchen and a dog belonging to the cook, but never mind—.

If we were to carry our observations into the realm of "sloppy" nursing, we could a tale unfold, indeed. Now is the time not only to preach but to practice cleanliness in everything, and let us thank God for the "particular people."

THE OFFENCES OF THE COCKROACH.

While swatting the fly we should not forget to pay our attentions to the cockroach, an insect with a diabolical role all its own. Science has been investigating its record and finds it guilty of distributing bacteria and filth, and making itself a general nuisance. Dr. C. C. Morrell tells us in the *British Medical Journal* that the cockroach "will eat almost any edible material, and, in addition, such materials as sputum, pus, decaying refuse, books, and even blacking. It has been shown that contamination with its fæces will bring about the souring of milk, and the insect is in all probability an active agent in the souring of milk kept in kitchens and larders; and, in addition, is undoubtedly a very important factor in the distribution of moulds to food and numerous other articles, especially when they are kept in dark cupboards and cellars where cockroaches abound. The cockroach may also play a small part in the dissemination of tuberculosis and in the transmission of pyogenic organisms."

The doctor has studied the live-history and biology of this pest and also made a series of experiments to determine the possibility of its acting as a disseminator of disease and contamination. He finds that the cockroach is becoming more widely distributed over the globe every year, and that the "numbers of these insects are rapidly increasing, and unless preventive measures are adopted the insect is likely, in the course of time, to become a very troublesome and possibly a very dangerous domestic pest."

The cockroach is not so hard to fight as are many other insect pests. A well built house—one with dry cellars, walls and floors, without crannies, cracks or dark corners in which insects can live, particularly

around the kitchen, will discourage the cockroach in every endeavor to colonize the commissary department. An old house, built on ancient lines, and offering inducement for vermin to make it their home, should be repaired so as to make it *dry* throughout and as tight as possible. Cracks and holes should be puttied up and thoroughly painted. Finally, every house, new or old, should be kept as clean as good housekeeping can make it and should be kept free from excessive moisture, by means of proper ventilation and heating. Powdered borax or boric acid, liberally distributed wherever the insects are found, often acts as a good preventive.

"ROPY" MILK.

Milk that has stood for a time, even in a good refrigerator, sometimes acquires a slimy or "ropy" consistency quite unlike that of ordinary rich milk. Cream separates slowly from slimy milk and sometimes does not rise at all; hence milk in this condition is unfit for the production of butter. Of course, "ropy" milk is far from appetizing and yet, strange to say, it is generally wholesome.

Many people have an idea that the ropy consistency of milk is due to adulteration or to preservatives added to increase its "keeping" qualities in hot weather. This theory is wrong, as can be proved by testing for the various preservatives and adulterants.

There are about a dozen different forms of bacteria, occasionally found in milk, any one of which produces the changes described above. One of these, a bacillus named after Guillebeau, causes an inflammation of the cow's udder which makes the milk ropy before it is discharged. Another germ, one of the micrococci, produces sliminess within five hours after milking. The other bacteria causing this form of deterioration require longer times for their action, varying usually with the temperature of the standing milk. Some of these germs develop a bitter or disagreeable taste along with the change in consistency.

TEETH OR TALENT?

Dental inspection in the schools of Ann Arbor proves to be one of the most profitable features of medical inspection, and meets with the enthusiastic approbation of the citizens. *Oral Hygiene* quotes from several prominent people who write in its favor. The statement of Mr. H. W. Nickols, better known as a musician than as a business man, is worth quoting because he gives his own hobby a secondary place as compared to the importance of a healthy mouth. Not every man is wise enough to hold such a view. He says: "In fact, more people suffer in after life from defective teeth than suffer from an incomplete knowledge of music and drawing. Better far do without music and drawing in our public schools than not to have Dental Inspection on the curriculum. This is a work to be encouraged and promoted in every school in the land."

Music or no music, art or no art,—this view tallies with the joint verdict of sanitarians and teachers who have made a serious study of the subject:

"As a result of bad teeth and unsanitary mouths the physical development of the child is seriously retarded. The more the physical development is disturbed, the less in general is the mental capacity. The worse the teeth, the worse, as a general rule, is the school standing."

PUNISHMENT OR PREVENTION?

WHAT shall be done with the poor blunderer who commits crime because he doesn't know better—because he is irresponsible for his acts? We have executed a good many of them in the past. We have a good many of them in our prisons and penitentiaries now, supposed to be suffering the "penalty" for acts which they performed under the impulse of diseased or defective minds. Is this the way that an intelligent government should deal with a dangerous and irresponsible element?

A most impressive group of portraits is published in the *News*, the Bulletin of the New York State Charities Aid Association. Here are the pictures of the man who killed President McKinley, the murderer of the Herkimer County school teacher, and other men who have attempted to take the lives of prominent officials. They are brought together in this place because they are all feeble-minded—belonging to a group whom people generally regard as harmless and innocent. Innocent they are, indeed, although often suffering the extreme penalty under the law for their actions, but harmless they never will be until they are segregated away from temptations and opportunities for doing harm.

We know now how to detect feeble-mindedness and we know how to prevent its increase, with all the toll that it levies on the tax payer and the worker in our industries. Shall we do it or wait until we are further than ever in debt to this expensive element of our population? Two excerpts from the *News* will help to impress the truth on our minds:

> There are approximately 32,000 feeble-minded, or one in every three hundred people, throughout the State of New York. Upon this fact all authorities agree.
>
> Out of this 32,000 feeble-minded population only about 5,000 are cared for in institutions designed for them, 4,500 are confined in institutions not intended for their care, while about 22,500, *or almost two-thirds of the whole, are at large in the community, at liberty to reproduce their kind and perpetuate the race-menace of increasing feeble-mindedness.*
>
> Two Chautauqua County children are now on the waiting list of the institution for the feeble-minded at Syracuse. Their mother has been on the waiting list of the institution at Newark for some time. If she had been committed to Newark as a young girl she would not now have two children applicants for admission to Syracuse.

A MAGNETIZED NEEDLE HOLDER.

THIS idea originated with Dr. Cheney M. Stimson, of Philadelphia, from whose report in the *New York Medical Journal* we take the following:

> Some time ago it occurred to me that if a magnet was placed in the end of a needle holder, it would greatly facilitate the handling of the surgical needle. Not only would it aid in picking the needle from the table, thus rendering it more accessible for adjustment in the jaws of the holder, but it would be of distinct advantage in regaining needles and pieces of needles which had accidentally fallen into inaccessible places in the field of operation. With this object in view I had an ordinary Doyen needle holder magnetized and found that the idea was practicable. The instrument would not only pick up and hold one needle, but was capable of attracting and holding several needles of various sizes and at any place thereon where the jaws of the instrument happened to make contact. It then occurred to me that this phenomenon of magnetization might be influenced by the various changes in heat and moisture to which surgical instruments are subjected. I therefore placed the magnetized instrument in boiling water and let it remain for half an hour; there was no apparent change in its attractive power. Its magnetic power was also tried in water and in the various antiseptic solutions and found to be unimpaired.
>
> Magnetization is not affected by the temperatures of sterilization. The harder the steel the more difficult to magnetize, yet hard steel retains its magnetization longer than soft. Magnetized to saturation hard steel will hold its magnetism permanently, provided it is not subjected to sudden, heavy blows, to intense heat, or to powerful electrical currents. Because of its comparative hardness, the steel of ordinary needle holders, so called spring steel, is susceptible of considerable magnetization and, according to the degree of hardness, will retain magnetism for various periods of time. For magnetization, however, the instrument should be hardened just to that degree where it does not become brittle.

The author gives detailed directions for magnetizing needle holders and other objects of steel.

THE PATIENT IS INSANE, WHAT NEXT?

By Dr. Bayard Holmes, Chicago, Ill.

There is no emergency in life which the family is so poorly prepared to meet and none in which public opinion is so at variance with common sense as the onset of insanity in one of its members.

Insanity is a symptom of many conditions: old age; acute infection, such as typhoid and pneumonia; alcoholism; and several of the critical periods of life. On account of the various causes of insanity, the search for which is now only in its beginning, and because these insanities manifest themselves in so many different ways, it is extremely difficult to make any general remark that will not at once arouse very positive and well-founded exceptions in the minds of those who are familiar with the conditions.

It is well to consider a few matters as axiomatic, which we have no space here to discuss. In the first place every member of the family must understand that in spite of a contrary public sentiment it is far less disgraceful to be insane or to have insanity in one's family, which is an unknown disease, than it is to suffer an attack of the grippe or to have a member of the family come down with typhoid fever or tuberculosis, which are perfectly known and preventable diseases. In the second place it should be distinctly understood that every form of insanity requires just as prompt and skillful hospital treatment as a typhoid fever, a pneumonia, or a ruptured appendix. This is a fact, although there are not six cities, or other communities in the United States in which there is a general hospital that will admit an insane person to the same prompt and skillful treatment as the beforementioned conditions receive. It is one of the most inexplicable and humiliating facts that even the largest general hospitals in practically every city of the United States are wholly unprepared and unwilling to take care of insane persons. It is further almost incredible that medical men who practice psychiatry in the largest cities have no properly equipped general hospitals in easy reach, to which they can remove, and in which they can care for the acutely insane. In the third place, the hospitals for the insane have been established by all the states in the Union and these institutions are not able to admit patients until these sick folks have been legally committed,—a process which requires in some states as many as ten days, and the actual, physical appearance of the patient (!) in an open court of law. This barbarous, inhuman and destructive legal ceremonial is as disastrous to the mind diseased as it would be to the brain compressed by hemorrhage from a ruptured middle meningeal artery or a depressed fracture of the skull. If every case of appendicitis, mastoiditis, or cerebral compression from fracture, hemorrhage or abscess, had to be taken for ten days to a court of law and adjudged suitable for hospital treatment, the results would be no more disastrous for these patients than it now is for the insane.

To show the dreadful acuteness and severity of insanity, it may be noted that in Albany, New York, where an enlightened profession and an intelligent community provided a pavilion in the general hospital for the reception and treatment of the suspected and acute insane, 234 patients were admitted during one year, of whom twenty died in the acute stage of the disease. This is nearly ten per cent. Moreover seventy-four did not improve and had to be committed to institutions for the insane, while 126 recovered completely or were so relieved that they did not need commitment. In the observation wards of the Glasgow general hospital, the percentages of death during a decade varied between fifteen and twenty per cent. of the admissions each year. The number that failed to recover and eventually were certified and committed to asylums was only about twice as many, or thirty-three per cent. of the admission.

The possibility of recovery from an acute attack of insanity is largely dependant upon prompt relief; and in this disease, relief can be looked for only where the appliances are suitable, the attendants skillful and well trained, the medical and surgical faculty alert to all the possibilities that give rise to mental disturbance, and the treatment aggressive.

There are several conditions of life under which mental aberration is prone to appear. Some of these conditions are so well recognized that patients generally get prompt and efficient treatment, while others are so rarely considered by the laity and by the general practitioners of medicine that it is difficult for the consulting alienist to persuade them

of the danger in which the unfortunate and eccentric patient is found.

Probably the most expected or anticipated mental breakdown comes toward the end of life and is manifestly due to the physical conditions of old age. These mental aberrations, however, are of such a nature that they can often be dealt with at home under the care of a wise and cautious physician and an experienced and tactful nurse. The economic complications of the insanity of old age, increase with the financial resources and obligations of the patient. While perhaps the majority of old men and wealthy old women maintain to the very last a fair degree of economic and financial judgment in spite of the fact that their lapses in other directions are frequent enough, far too many of them commit economic errors which ought to lead them to completely safeguard their business responsibilities at a comparatively early age. A conservator can be appointed by the court with the consent of the patient or this can be done at the instigation of the family itself. It is possible that in the progress of society old people will be required at a certain age to select an officer who will thereafter *visé* and legalize their subsequent fiscal acts.

Insanity is apt to appear in women during their pregnancy and after their delivery. This condition must be looked upon as one of the possible complications of childbearing, especially if these events have been frequent and crowded. Such a puerperal insanity needs and deserves the promptest and the most scientific treatment. The care of such a patient should not be left in the hands of the obstetrician and the obstetrical nurse, but the patient should be at once removed to a hospital in which there is such mechanical equipment as will prevent her doing damage to herself or her child, and in which medicinal or other restraints will be unnecessary. The results of prolonged, repeated puerperal manias are disastrous to mental integrity.

After the age of twenty-seven and until about forty-five, men, and in a less degree women, who have suffered of syphilis early in life, are subject to the onset of a disease of the greatest gravity and the most rapid fatality, known as general paresis,—a disease in which insanity is the principal initiatory symptom. In its beginning, however, this is a condition difficult of diagnosis, and in many of its forms likely to give rise to the most disastrous family and economic blunders. It is sure to be very rapidly destructive to the patient's mind and life. While the patient may not appear to the ordinary individual as eminently crazy and fatally marked for a progressive disaster, to the experienced alienist he is most dangerous to his family, to his business associates and to himself. The greatest wisdom is shown in a prompt diagnosis and in his immediate and complete retirement from the world of affairs and his preparation for a more or less rapid end. Fortunately, with the better methods of physical diagnosis furnished by the examination of the blood, and the cerebro-spinal fluid, the chances of an early diagnosis are greatly increased. It is unwise, unsafe and ultimately impossible for such a person to be taken care of at home and he should be immediately committed and placed in one of the institutions of the state.

In England and in most of the states of the Union the delirium of an habitual drunkard is not considered an insanity, and a patient suffering of such a condition is not subject to commitment. A physician who certifies that an alcoholic is insane is in danger of prosecution for libel. In the state of California, drunkenness, as well as insanity, subjects the patient to commitment. There is growing evidence that a larger and larger number of habitual drunkards are such because they are primarily crazy and the mental aberration is covered up for a time by the more prominent and the more conspicuous symptoms of alcoholism.

Again, there are at least two special forms of mental aberration, which seem to be brought on alone by excessive or protracted alcohol poisoning. The growing use of methyl alcohol in the various arts and the careless use of medicinal intoxicants and poisons is producing a considerable number of cases of insanity which should receive the earliest and promptest isolation and protracted hospital treatment. The symptoms in these cases are not those glaring ones that precipitate legal commitment, yet they are of such a nature that they are readily recognized, while the patient has sense enough to permit voluntary commitment. In any such case the profession should stand together and have the support of the legal profession in placing every person threatened by his occupation, by his medication, or by his drug habit, with insanity, in the care of the institutions for the insane, where alone there is any

promise of restoration to health and usefulness.

In Europe where the sick indemnity prevails, administered by the trade unions and an official fiscal and medical staff, these patients are placed in hospitals very early on the appearance of the disease, and an incredibly large portion make perfect recoveries. Moreover, through education of recovered patients and through a modification of their occupational surroundings and their habits of life, and through the interested espionage of their group, and the officers of the government, recurrence is generally prevented. With us, however, recurrence is the rule.

About one-third of all the commitments to our asylums and hospitals for the insane are persons in the prime of life who are attacked with an incurable malady sometimes called adolescent insanity, and sometimes called dementia precox. This is a disease which affects the two sexes in about equal proportions. It shows itself, as a rule, from sixteen to twenty-three in girls, and from eighteen to twenty-eight in boys. It generally comes on gradually with eccentricities of conduct, increasing shyness and bashfulness, and is attended by peculiar acts that at last accumulate into an explosion of unreasonable conduct that draws attention to the progressive disease. When there is the least suspicion of the onset of this terrible malady, a wise, tactful and considerate physician or alienist should be called, and the patient's habits and methods of thought as well as his nutritional condition, should be carefully considered. It is often possible by immediate isolation from previous cares and surroundings, and by a training in proper habits of life, to restore such a young person to health. The physician's advice in this matter should be implicitly followed regardless of sentiment, maternal or paternal anxiety, and the conflicting advice of neighbors and friends.

We have not spoken of the most hopeful forms of insanity because they are not recognized under any definite and comprehensible name. Fortunately, about one-third of all the insane are in the class.

The most troublesome and the most hopeless of the insane are the small group known as the paranoiacs, because they can never be made to realize their own condition and they frequently remain at home and bring disgrace upon their friends, make trouble in the community, and antagonize public opinion toward the more unfortunate insane.

Practically the only other form of insanity which can be looked upon as incident to the ordinary crises of life, outside of senile insanity and adolescent insanity, is that which affects women at the menopause. It is probably due to the changes in their internal secretions and the peculiar sensations which occur at this time. It is not often an insanity of such a violent type as to secure prompt attention, but the subsequent mental integrity of the patient depends upon such careful treatment that no pains should be spared in securing the best advice at the earliest possible moment. One of the most important matters is the promotion of the patient's excretions and secretions. The stay of such a patient at the baths or at the mineral springs or even at the sea for a season will often tide over a threatening mental breakdown and guarantee for the woman a quarter of a century of the most active and unperturbed existence.

Let us assume now that some members of the family think it possible that a certain other member of the family is insane. What should be done? Manifestly the first duty is to get the family physician or some other physician in whom the family has the most implicit confidence, not alone as a physician and man, but as a friend and counsellor, to come in and hear the evidence and make the diagnosis between sanity and insanity if he can. In any case, his counsel should be sought and his advice should be followed implicitly. As a rule, the family is very poorly placed to judge of the sanity or insanity of one of its members. The greatest strife often arises in the family over even the examination of one of its members accused of eccentric or irrational conduct. The physician himself, if, in spite of the adverse judgment of the most influential or the most numerous members of the family, he considers the patient insane, is likely to be severely criticised, regardless of the ultimate result. On that account the deliberations should be undertaken with the most conciliatory and considerate spirit toward all concerned.

If the physician, as a result of his examination, decides that the patient is insane, or is in that borderland where it is difficult to decide between perversity and idiosyncrasy on the one hand, and insanity on the other, he must consider the judgment of the profession in favor of institutional rather

than family treatment, as obligatory upon him. He may then call for consultation with a psychiatrist or alienist. This he should do under all circumstances and he must do so if the family request it. Having now the opinion of the general practitioner and the specialist, that the patient is insane or threatened with insanity, the family will at once ask, what can be done?

Unfortunately, our knowledge of insanity to-day is very similar to our knowledge of the infectious diseases a hundred years ago. In those days malaria, yellow fever, smallpox, erysipelas, diphtheria, tuberculosis and syphilis, that are so thoroughly understood to-day, were as mysterious as paranoia and dementia precox are to-day. The only insanity that we know anything about is general paresis. This disease we can diagnose, pronounce the unfavorable prognosis, predict the course, and assign the end. We have no cure for it, but it can be prevented by preventing syphilis, by properly curing it, and by regulating the life of the person who has had syphilis. In all the other insanities we have no pathology, we know no cause, and we are greatly restricted in our methods of treatment. Nevertheless, one thing has been firmly established, and that is that in the onset of any of the insanities, immediate hospital treatment should be instituted. This is the dictum of present experience, and present professional opinion.

We have previously noted that the detention of a patient against his will in an institution or hospital, before commitment, is a punishable offense. The law does not protect the physician in protecting the uncommitted insane person from doing himself great injury or doing himself to death. The hospital authorities who detain a patient are subject to severe fines and punishments. Therefore, commitment is necessary. In the City of Chicago, in the State of Illinois, commitment can be made only upon the complaint of a member of the family, a neighbor, or other interested person, to the county court, the service of a legal paper upon the insane patient, his trial after ten days by a jury in open court, and a verdict by that jury that he is *non compos mentis*. Then he is committed to such institution as the friends elect, or the court directs. Throughout the rest of the State, however, a patient may be committed by commission. Two physicians, at the direction of the county judge, examine the patient, and render a formal report of their opinions as to his sanity. The judge acts upon their advice and the patient is committeed as before. In the City of Chicago, commitment requires at least ten days and usually these ten days are spent in the detention hospital. In the country, commitment can be made by commission in a few hours. Both methods are statutory.

Besides these two methods of commitment, patients may be voluntarily committed, but such patients can terminate their detention in the hospital by giving three days' notice, in writing, to the proper officials.

The Society for Mental Hygiene has recently published the abstracts of the laws of the several states relative to commitment. The price is one dollar. Address the Secretary, 50 Union Square, New York, N. Y.

In most of the states, and in England, commitment by commission is the rule, and from such commitment the patient may appeal to the court for trial by jury. Only the paranoiac is in a condition to appeal.

Since we advise the immediate removal of the insane patient, or the patient suspected of insanity to a state hospital for the insane, it is necessary to secure prompt commitment. The ten days of legal travesty necessary to secure the commitment of an insane person in Cook County may be avoided, and the patient may be relieved of the material danger of such a deday, by voluntary commitment, providing this can be accomplished. If it is necessary afterwards to get a legal commitment, the process in the country district where the institutions for the insane are located, is generally by commission.

During the commitment the utmost confidence should be shown the patient, and he should be told the truth about his condition by each and every one of his friends and his medical attendants—the whole truth and nothing but the truth. He should be told where he is going and when his friends will come and see him; otherwise the confidence which must exist between the hospital staff and the new patient will be delayed, and cure retarded.

The committed patient is generally taken to the hospital by a deputy sheriff. This is a barbarous practice. He must present the patient and a legal document at the hospital. Sometimes the deputy, on arriving at the hospital, is so drunk that it is difficult to tell which needs hospital treatment most, and cases have actually occurred in which

the deputy sheriff was left in a saloon on the way and the patient went on to the hospital alone. Some friend should go with the patient to prevent this barbarism, and stay for a day or two, in order to give the necessary history of the patient at the hospital. It would be well if the family physician could displace the sheriff in this important journey.

The cost to the patient of commitment by jury in Cook County is theoretically nothing, but the judge generally assesses the friends of the insane who are able to pay, from ten to twenty-five dollars for transportation to the state institutions.

Commitment by commission is a little more expensive. The two physicians, who are the commissioners appointed by the court, are entitled to a fee of five dollars each, payable in advance.

The costs of maintenance of the patient in the state hospitals are now charged against the patient's estate, or his family. It is about $150.00 to $200.00 per year. The family should furnish clothes.

In the state institutions it frequently happens that the interests of the patient toward recovery are advanced by the employment of a private trained nurse. This costs about forty dollars a month. Superintendents are always willing to employ such nurses at the expense of the patient when in his judgment it is desirable. It often happens, unfortunately, that thoroughly trained and reliable nurses cannot be secured, especially since the introduction of civil service in the state institutions.

There is an unreasonable, but deep-seated prejudice against the state hospitals. This is largely due to the legal aspects of commitment, to the employment of sheriffs, to the ignorance of the friends of the insane in interpreting the rules of the institutions, and to the absolutely unfounded attacks made by the press upon the management of the institutions, instigated in the past by their subservience to party politics. It is believed that the present position of the institutions under the Board of Administration will in the future obviate these attacks and forestall the newspaper reports of the accidents which are bound to occur in a population of fifteen thousand insane people in the custody of the state.

108 North State Street.

WHAT MRS. HANLEY HAD TO PUT UP WITH WHEN THE TRAINED NURSE CAME

"Yes, we had a trained nurse for pa," admitted Mrs. Hanley with a little sniff. "Doctor Yerkes thought from the first that I wasn't able to take care of him, but I held out until he was just real stern, and asked me if I wanted to lose my husband. Then, for the looks of the thing I gave up. It's a pity a woman can't take care of her own husband these days, especially a woman that's had the training in sickness that I've had, but you know how it is. If I'd breathe a word of this where Mary Jenkins would get hold of it, she'd say I begrudged the money that pa was using in his sickness. You musn't tell a word I say but it's just awful to have a trained nurse in the house."

"Why, what does she do?" asked sympathetic Mrs. Burke in a guarded tone.

"I could easier tell what she don't do," said Mrs. Hanley grimly. "The very first thing she did when she got here was to put on the tea-kettle and boil the water for him to drink. Did you ever hear of the like? When I wanted to know why she did that, she said, as pleasant as a basket of chips, that the water was impure. Will you think of that? The well John's grandfather dug when he took up the farm from the government! And the next thing was to give him a bath! That was the most high-handed proceeding I ever heard of, but the doctor stood right by her, so what could I do? I gave them both a piece of my mind when I got them where pa couldn't hear, but the young woman just patted my shoulder and said times had changed."

"What did Mr. Hanley say?" questioned the neighbor.

"Oh, he was too weak to say anything. He just fell asleep as soon as she got through fussing over him, and didn't wake for a couple of hours. I feel certain that she gave him a dose of some kind to put him to sleep, but he declares not. She's got him so under her thumb that everything she says is law and gospel. I told him yesterday that if that girl would say the moon was made of green cheese, he'd believe it."

"Well, maybe, she's doing just the right thing?" said Mrs. Burke. "You know it's wonderful the way they educate them in hospitals nowadays."

"Educate them! Is that what you think? I thought that, too, till Miss Gilbert came. If you'll believe me that girl uses hot stove lids and hot plates and hot salt bags just as I've done for years and years. I supposed she'd know all the up-to-date things about nursing, and have a whole kit of things to work with, but she hasn't. The other day pa felt kind of down and low-spirited, and I was going to give him a dose of Smithers' bitters, but she fairly took the spoon out of my hand, and what do you think she used? Why, nothing in the world but a cup of hot milk. And pa, the great goose, if I must say it, declared it did him more good than the bitters. Men folks are the most provoking creatures in the world."

"Hot milk? For a sick person. You surely must be mistaken."

"No, I'm not. She just sticks to the simplest things you ever heard of. I 'lowed she'd be wanting all the high-falutin' things from the city, but she uses grape juice and milk and eggs and chicken broth and just the commonest things you ever heard of. There was pa coaxing for mince pie and fried fish before she got here, and now he's as meek as a lamb. I've argued with him by the hour trying to get his mind off the things he couldn't have, but when Miss Gilbert says no, he never answers back. Sometimes I think he must be out of his head, but he won't have it that way. He's had enough to turn his brain, if he's flighty, for the way she manages things almost distracts me. She will have a window open night and day in spite of all I can do. I told her the other day that I had taken care of sick folks before she was born, and often we had to hang quilts over the windows to keep out the air, but she only smiled and said, 'It is possible?' in that everlasting polite way she has. You can't make her mad no matter how hard you try. She always has a smile and a nice word for you, till in the end you feel rather ashamed to be mean to her."

"Why don't you just let her have her own way, since Mr. Hanley is getting along so well? She'll soon be gone and then you can do as you please."

"That's easy to say, Mandy Burke, but not so easy to do. The other day she refused to let pa's nephew and his wife and children go in to see him, and I told her I thought she was carrying things a little too far. She said the bedroom was not large and pa needed all the fresh air in it. And besides the doctor said he should not have any company. Of course the doctor meant strangers, but she wouldn't hear to reason. James and Bessie were real provoked and wouldn't stay only the afternoon, though I tried to explain. And that wasn't the worst of it, either. The children got rather noisy, as children will, and Miss Gilbert came out and asked them to keep the little folks quiet. Oh, she did it with that smile of hers, but you could see she was mad. It's enough to provoke a saint to be told what to do in your own house. Of course pa stood by her, and said he was glad when the children were out of the house because they made his head ache, and the doctor lectured me about it."

"Well, I must be going home, Mrs. Hanley. I do hope you will soon be able to look after Mr. Hanley yourself, so keep well and content. I would not worry about anything if he was getting along all right, and the doctor told Charley he is. Just put up with her whims a little longer and then you will be rid of her."

"I guess you wouldn't say that if she was in your house," said the hostess applying her handkerchief to her eyes. "If some stranger would come into your house and take down the hair wreath your own mother had made and some everlasting flowers you had had in a vase in your bedroom so long as you couldn't remember when you put them there, and insist on having blankets instead of comforters, and insinuate that you talked too much to your own husband, and said that the water wasn't fit to drink, and swept your best carpet with a damp broom, and scalded off the dishes as if pa was poison, and all the other things I've put up with since that nurse came, then you would talk about being content. I don't wish anybody any bad luck, but if you ever do have a nurse in the house, Mandy Burke, you'll see how it goes. She's always talking about sterilizing and keeping things clean, but I told her the dust she raised taking the ornaments off the bedroom wall and letting the draught keep the dust in motion, didn't argue that she knew much about cleanliness. Well, come back when you can. Good bye! Yes, I'll be over as soon as I get a chance! Good bye!"—*The Advance.*

NURSING AFFAIRS, PAST AND PRESENT, IN CANADA.

Our readers will be interested in this chatty resumé based on Vol. IV of "A History of Nursing," and printed in "*The British Journal of Nursing.*"

"In the earliest days of her history, and throughout the French régime (1535—1759) Canada was indebted wholly to the religious orders which came out of France for the establishment of hospitals, and the care of the sick in their homes."

"Throughout the ravages of the Indians the constant warfare between French and British, and the many epidemics and plagues to which Canada fell heir, these hospitals sheltered and cared for the wounded and sick. Later, when in 1775 the Americans invaded Canada they figured as military hospitals and barracks.....

"With the settlement by the British, hospitals were established under civil or military control, in the more thickly populated districts, at shipping ports and in towns along the waterways. Gradually the hospital idea grew until now there are found hospitals from coast to coast, not only in the cities and towns, but throughout the country and sparsely populated districts."

Of the work of Miss Norah Livingston at the Montreal General Hospital, and of Miss M. A. Snively at the Toronto General Hospital we read that the history of their work "is the history of nursing in Canada. Their graduates have gone forth from their hands into every corner of the Dominion, building, developing, reforming, carrying the traditions and atmosphere of the schools in which they were trained. To Miss Livingston is due not only the efficiency of the nursing department of the Montreal General, but the high tone and standard of nursing to-day in many parts of Canada. Miss Snively, strongly social by nature, has been foremost always in public movements, in nursing organizations, in the superintendents' conventions, in committee work, and in educational propaganda. Hers is the credit of having led Canadian nurses in national and international relations, and of having cherished the international spirit. She rightly regarded the national associations of Canadian nurses, and their affiliation with those of other countries, as the crowning work of her nursing career."

An interesting review is given of the principal hospitals of the Dominion, the most important in the West being the Winnipeg General. "In 1871, after the collapse of the rebellion, the little colony of Fort Garry enjoyed a considerable boom, and many volunteers who had come up from the East beat their swords into ploughshares and remained as colonists. Other immigrants came in over the Dawson route, or by river and cart from St. Paul. Houses were few and overcrowded, and, when sickness broke out, conditions were such as to render immediate action necessary. A meeting was called, a board of health formed, and steps taken to begin hospital work immediately. A one-story frame house was the best place that could be secured, and thus became the first general hospital at Winnipeg. It was not destined to become a settled institution without its full share of the vicissitudes of the pioneer. The present location reached in 1883 was the eighth occupied."

The children's hospital at Toronto, which owes much to the liberality and devotion of its president, Mr. J. Ross Robertson, is "one of the most perfect of its kind in the world."

In addition to the voluntary hospitals there is a system of marine hospitals maintained by the Federal Government including all seaports. The Government also maintains hospitals in connections with immigration and Indians.

In connection both with the militia and the army a certain number of nursing sisters are appointed; anti-tuberculosis work is carried on amongst both Indians and immigrants; district nursing is organized through the Victorian Order of Nurses; school nursing is at present carried out under voluntary, not State authority.

Concerning education and organization, lack of uniformity in all respects is reported. We read that "In almost every Canadian city are to be found private hospitals corresponding to the 'nursing homes' in Great Britain. They are the private property of physicians, nurses, or stock companies. They are sometimes supervised by competent superintendents and nursed by graduates, but too often by young women, who vainly imagine that they are receiving an equivalent in professional education for their time and energies. These inadequate small schools and correspondence schools, together with the unrestricted influx into the Canadian West of disqualified nurses and midwives from the United States and Great Britain, are an increasing menace, not only to the nursing sisterhood, but to Ca-

nadian society at large, a menace which can be checked only by the passage of a uniform registration bill in each province."

The Canadian Society of Superintendents of Training Schools for Nurses was established in 1907 largely through the efforts of Miss Snively, who became its first president. She immediately threw all her energies and prestige into the work of bringing a national society for nurses into being, and in 1908 this society was formed and the well merited honor of the president's place was offered to her, and "under her leadership Canada entered into the international group in London, 1909, at one of the most picturesque and stirring functions in which nurses have ever taken part."

The Canadian Nurse, of which Miss Bella Crosby is now editor, with an editorial board representing every province and nurses association in the Dominion, "has a future of importance before it, in welding the nurses of the broad provinces into one united body."

Newfoundland is an "independent little British colony, conservative and cherishing its individuality, which has given the profession of nursing some of its best members."

QUALIFICATIONS FOR PUBLIC HEALTH NURSES IN NEW YORK STATE

THE New Public Health Council, organized under the Laws of 1913, issues the following statement:

In regard to the public health nurses, the law provides that:

The Commissioner of Health, whenever he may deem it expedient so to do, may employ such number of public health nurses as he may deem wise within the limits of his appropriation, and may assign them from time to time to such sanitary districts and in such manner as in his judgment will best aid in the control of contagious and infectious diseases and in the promotion of public health.

For supervising public health nurses the Public Health Council has established the following qualifications:

1. They shall be registered nurses;
2. They shall submit evidence, satisfactory to the Public Health Council, of training and experience of not less than two years after graduation, in one or more of the following lines of work: a, maternity work; b, infant welfare work; c, social service; d, tuberculosis work; e, care of communicable diseases, and f, school nursing.
3. They shall be, when appointed, not less than twenty-five years of age.

For public health nurses (other than supervising nurses) it is provided that:

They shall be registered nurses twenty-one years of age at the time of their appointment.

Questions and Answers.

The following answers are not "official." They are prepared for the editor.

UNIVERSITY OF THE STATE OF NEW YORK, 21ST NURSES EXAMINATION

GENITO-URINARY NURSING

For Male Nurses

Wednesday, January 28, 1914—9.15 a. m. to 12.15 p. m., only.

Answer 10 of the following questions. Each complete answer will receive 10 credits. Papers entitled to 75 or more credits will be accepted.

1. Define (a) hypospadias, (b) epispadias.

Ans. (a) Congenital opening of the urethra on the under side of the penis or into the vagina. (b) Congenital opening of the urethra on the dorsum of the penis.

2. How would you prepare a patient for removal of vesical calculus?

Ans. Give mild diuretics a day or so before operation, to flush the bladder. Secure a good evacuation of the bowels also. Shave the hair from pubes and perineum and cleanse the skin of these regions, the abdomen, buttocks and thighs with soap and water, followed by mild antiseptic applications several hours before operation. Cleanse the genitals thoroughly.

3. What could a nurse do to relieve the pain of a prolapsed anus?

Ans. Anoint the surface with oil or

vaseline and apply compresses wrung from ice water. If this is not tolerated, hot, moist compresses may give relief.

4. What is the lithotomy position?

Ans. The Dorso-sacral postion: patient on the back, with legs flexed on the thighs, and thighs flexed on the belly and abducted.

5. What is incontinence of urine?

Ans. Inability to restrain the discharge of urine.

6. Give some results of carelessness in catheterizing.

Ans. Infection of urethra or bladder. Withdrawal of too much urine at one time. Wounding of urethra or bladder. False passage. Wetting of patient's clothing. Shock.

7. What are the symptoms of cystitis?

Ans. Frequent urination with tenesmus; pain and tenderness around the bladder; fever; urine scanty, high colored and containing mucus, blood, pus, amorphous and triple phosphates.

8. What preparation should the nurse make for the doctor in a case of urethral stricture?

Ans. Cleanse glands and meatus with soap and water followed by bichlorid of mercury solution 1 to 5,000. Irrigate the urethra with saturated solution of boric acid or other appropriate antiseptic. Irrigate bladder with same solution, if practicable.

9. Describe irrigation of the bladder.

Ans. The operator's hands must be prepared as for an operation, and all instruments and utensils must be surgically clean. The patient lies in the dorsal position, the bladder is emptied before the irrigation, and the genitals are washed with soap and water, followed by an antiseptic wash. The meatus is cleansed and the urethra irrigated as described above. A well lubricated catheter is carefully inserted into the bladder and the residual urine withdrawn. A glass funnel attached to four feet of rubber tubing is filled with the irrigating solution at a temperature of 100° to 105° Fahr., and when the air and cold fluid have escaped the tubing is connected with the catheter, the funnel is raised two or three feet, and the solution passed slowly into the bladder until it is distended. When distention becomes uncomfortable the flow of the solution is stopped; after a few moments the funnel is lowered so as to siphon the fluid from the bladder. The funnel is then refilled with solution, and the bladder filled again. This process is repeated until the outflow from the bladder is clear. With a double-flow catheter the process is similar, except that the distention of the bladder is controlled by compression of the outflow tube.

10. What is genito-urinary surgery and what organs are considered in this branch of surgery?

Ans. Surgery of the genital and urinary organs. Kidneys, ureters, bladder, prostate, urethra and all the organs of generation.

11. Why does not the urine return to the kidneys when the bladder is much distended?

Ans. Because the mouths of the ureters are guarded by valves formed of the lining membrane of the bladder and preventing reverse flow of the urine.

12. How are the various kinds of catheters sterilized?

Ans. Metal, rubber, glass and gum elastic are boiled in water five minutes or more. Others are sterilized by formaldehyde vapor or a solution of carbolic acid 1 to 20, and rinsed in sterile water.

13. What is the minimum period of incubation of syphilis?

Ans. Three days has been reported, but on doubtful authority. Ten days is a more probable minimum period.

14. What is the maximum period of incubation of syphilis?

Ans. Six months.

15. What is the average period of incubation of syphilis?

Ans. Fourteen to twenty-one days.

MATERIA MEDICA.

Wednesday, January 28, 1914—9.15 a. m. to 12.15 p. m., only.

Answer 10 *of the following questions. Each complete answer will receive* 10 *credits. Papers entitled to* 75 *or more credits will be accepted.*

1. Define (a) decoctions, (b) infusions, (c) tonics, (d) syrups.

Ans. (a) Liquid preparations made by boiling vegetable substances in water—usually of 5% strength. (b) Weak liquid preparations for internal administration, made by treating a drug with hot or cold water, and usually of 5% strength. (c) Drugs or

other agents used to increase vital activity or "tone." (d) Concentrated solutions of sugar in water, medicated with one or more drugs and intended for internal administration.

2. What is the ordinary dose of croton oil and how should it be administered?

Ans. One drop, placed on the tongue with 5 or more drops of sweet oil; or it may be given in emulsion or pill.

3. If a strength of m v represents gr. 1/150, how many minims will be required to make a dose of gr. 1/60?

Ans. 12½.

4. What is the dose of syrup of ipecac for an infant?

Ans. Two to five drops as an expectorant; ½ to one drachm as an emetic.

5. How many drams are there in 2/3 of a pint?

Ans. Eighty-five and one-third (85 1/3).

6. What in fluid measure is allowed as the equivalent of the liter?

Ans. One quart.

7. Express in full (a) b. i. d., (b) q. h., (c) a. c.

Ans. (a) *Bis in die,* or twice a day. (b) *Quaequae hora,* or every hour. (c) *Ante cibos,* or before meals.

8. Mention (a) one hypnotic, (b) one stomachic, (c) one purgative. State the usual dose of each.

Ans. (a) Chloral. (b) Gentian. (c) Castor oil. Dose: (a) Gr. 7½. (b) Gr. 15. (c) Drachms 4.

9. In giving drugs to produce sleep, mention *three* conditions that should be secured in order to make them effective.

Ans. The patient should lie down, should be comfortably warm and the room should be quiet and not too light.

10. How much mustard to a teacup of water should be used in order to produce emesis? If necessary to repeat the dose, how often and how many times should it be repeated?

Ans. One tablespoonful. Two more doses may be given, usually at fifteen minute intervals.

11. Mention a drug having a cumulative action.

Ans. Digitalis.

12. Mention *one* medicine that should always be given through a glass tube.

Ans. Tincture of the chlorid of iron.

13. What are the toxic symptoms of hydrated chloral?

Ans. Prostration, dilated pupils, slow pulse, becoming weak and rapid, slow respiration, subnormal temperature, coma.

14. Define (a) antiperiodics, (b) carminatives, (c) anesthetics.

Ans. (a) Drugs or remedies employed for prevention or cure of malarial poisoning, because of their tendency to break up the periodicity of the attacks. (b) Remedies given to expel gas from the alimentary tract, by increasing peristalsis. (c) Drugs used to produce loss of sensation, either local or general.

15. Mention (a) a drug that will produce dilation of the pupil, (b) a drug that will produce contraction of the pupil.

Ans. (a) Atropin. (b) Eserin.

BACTERIOLOGY AND SURGERY

UNIVERSITY OF THE STATE OF NEW YORK, 21ST NURSES EXAMINATION.

Thursday, January 29, 1914—9.15 a. m. to 12.15 p. m., only.

Answer 10 *of the following questions. Each complete answer will receive* 10 *credits. Papers entitled to* 75 *or more credits will be accepted.*

1. Why is it necessary to repeat, at least once, the process of sterilization of normal salt solution?

2. Define immunity.

3. Mention *two* means by which immunity may be acquired.

4. What is the most important measure used for controlling the infection of milk?

5. Define healing by first intention.

6. What preparation of the field is necessary in the application of plaster bandages?

7. Describe a course of precedure if secondary hemorrhage should follow the removal of tonsils.

8. Mention *four* classes of wounds.

9. To what is discoloration of the tissues following an injury due?

10. Define (a) septicemia, (b) pyemia.

11. Briefly describe the essentials in the nursing care of a patient who has undergone the operation of tracheotomy.

12. How may the green of adhesive plaster be removed from the skin.

13. Name *three* of the most important points to be observed in the care of surgical instruments after operations.

14. What care must be taken when making solutions of carbolic acid? Why?

15. Why does alcohol not disinfect if used stronger than 70%?

DIETETICS

Thursday, January 29, 1914—9.15 a. m. to 12.15 p. m., only.

Answer 10 *of the following questions. Each complete answer will receive* 10 *credits. Papers entitled to* 75 *or more credits will be accepted.*

1. To what classes do the following foods belong: (a) beef, (b) potatoes, (c) eggs, (d) lettuce, (e) butter?

2. What digestive juices are involved in the digestion of *each* of the above foods?

3. Name *three* kinds of food that should in general be eliminated from the diet of the sick.

4. What is the difference between cocoa and chocolate?

5. Why is human milk more easily digested than cow's milk?

6. Give the relative per cent. of fat and proteid in 7% top milk.

7. Give menus for *three* meals, with a special view to increasing bodily weight in a person who is otherwise healthy.

8. What is the chief dietary value of fruits?

9. Of what food value are salads?

10. What foods do you eliminate in cases of diabetes? in cases of nephritis?

11. How would you cook rice for an invalid?

12. Give your method of baking apples.

13. Mention three ways of cooking eggs, suitable for a patient on a soft diet.

14. What kinds of food would you give in cases of rachitis?

15. What diet in general would you follow in nursing patients with nervous disorders?

Have your answers to these questions ready for comparison with the answers to be given in a later number of the GAZETTE.

INFLUENCE OF HEREDITY.

"That's a fine baby of yours, Bill," said the boss to his chauffeur.

"Yes, Mr. Wilkins," said the chauffeur. "My wife and I are pretty proud of him. He's the latest model, all right—a self-starter, with an automatic horn that would wake the dead."—*Hospital Topics.*

WHAT I must do is all that concerns me, not what the people think. This rule, equally arduous in actual and in intellectual life, may serve for the whole distinction between greatness and meanness. It is the harder because you will always find those who think they know what is your duty better than you know it. It is easy in the world to live after the world's opinion; it is easy in solitude to live after your own; but the great man is he who in the midst of the crowd keeps with perfect sweetness the independence of solitude.—EMERSON.

OUTDOOR TREATMENT OF PUERPERAL INFECTION.—For the past five years outdoor treatment of puerperal infection has been the routine in the Boston City Hospital. This E. B. Young and J. T. Williams (*Boston Med. Surg. Jour.*) report as having reduced the mortality from 44.6 per cent. to 24 per cent. They say that this treatment probably exerts its action chiefly by increasing the amount of hæmoglobin in the blood. Sunlight is probably quite as important as fresh air. Curettage is contraindicated in puerperal infection, because it increases the mortality nearly 10 per cent. A single intrauterine douche of sterile salt solution should be the only local treatment, and some writers deny the value of even this. Antistreptococcic serum and vaccines have not proven of much value. The outdoor treatment is the most effective known at present for puerperal infections.—*Canadian Practitioner and Review.*

DAMAGES AGAINST A NURSING HOME PROPRIETOR.

A good deal of sympathy is being expressed with Dr. Bradford, who has been cast in damages of £100 owing to accidental burns sustained by a patient in the nursing home which the former conducts. It was obvious on the evidence that liability for negligence would attach to someone over the matter; and the chief point of interest of the case to managers of private hospitals lay in the decision as to whose the liability might be. The nurse whose act resulted in the burns was not brought into the action by either side. The plaintiff sued the proprietor on the ground that a contract of service existed between them, and that the nurse was an employee of Dr. Bradford's, for whose acts he was responsible. The defence was that in doing what she did the nurse was carrying out the direct orders of the surgeon, which were not conveyed through Dr. Bradford at all. The correctness of this statement of fact appears to have been admitted, but it did not avail to shift the burden of responsibility on to the shoulders of the surgeon. Technically, there is little doubt that the verdict was just and proper; but, all the same, it is hard lines on Dr. Bradford, whose project of a big private hospital of two hundred beds was commented on in The Hospital only a fortnight ago. The solicitors who prepared his case are those whom the London and Counties Medical Protection Society retains: so probably this society has sustained one of its very infrequent rebuffs. —*Hospital.*

PRAISE FOR SCHOOL INSPECTORS AND NURSES, IN BUFFALO.

It is very encouraging to know that the work of our school inspectors and nurses is recognized and approved by the Department of Public Instruction. In his last report to the Common Council Dr. Emerson, the Superintendent of Education, calls attention to the activities of the medical inspectors in recommending care and treatment for children with physical defects. He says:

"In this way many children have received medical and surgical attention who otherwise might still be suffering in body and retarded in their progress through the schools. Medical supervision of this kind facilitates the advancement of pupils from grade to grade and reduces the number of repeaters in our schools, thus lowering the per capita cost of instruction. It raises the general average of efficiency both for pupils and for teachers, and is therefore a measure of the wisest economy."

Referring to the services of our school nurses, he says that they have supplemented the work of the doctors by treating many conditions that would otherwise have remained uncared for in the families of the poorest children, and by visiting the homes of those who were neglected."

The Superintendent believes that it is most desirable to increase the number of school nurses in order to cover the needs of the schools more efficiently. He notes the growth during the past year of the special Classes in the public schools and looks forward to an increase in the number of mental examiners, who are needed "in order that more attention may be given to the physical as well as the mental needs of this unfortunate class of subnormal children."

This is a good time to acknowledge the fine spirit of co-operation between the two Departments, of Health and Education. We have no differences of policy to be adjusted. We are simply working in harmony for the best good of all the children—and we find plenty of work to do.—*Buffalo Sanitary Bulletin.*

Every human being carries within him memories that have totally faded from conscious recollection but may be recalled under certain conditions; and such memories not infrequently relate to matters of which he never had conscious knowledge but which it can be demonstrated once proved part of his actual experience.—*Bruce.*

"For the making of billiard balls five hundred elephants are needed every year," said the famous big-game hunter in his lecture on India.

"How strange!" whispered Mrs. Winsome to the lady who sat next, "that people can teach such great beasts to do such delicate work!"

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Bacilactic Drains—Persson's

Used as a local treatment in sub-acute and chronic urethritis; 25 treatments for $2.00.

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DETROIT, MICHIGAN

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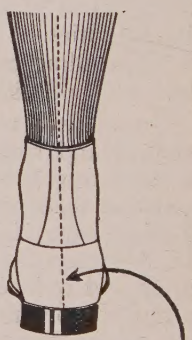
In Treating Weak Arches

and ankles, either in the incipient or advanced stages, careful physicians understand the importance of employing corrective mechanical assistance.



Same foot after being fitted in a Coward Arch Support Shoe; ankle kept upright, arch held in place—weight of body equally distributed.

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WITH COWARD EXTENSION HEELS

are of immediate benefit in all cases of structural foot weakness, including "turned" ankles, weak ligaments, falling arch and flat-foot.

Constructed on approved anatomical principles, these remedial shoes provide the needed support, without discomfort to the wearer, or interference with the muscular action of the feet.

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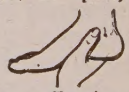

Coward Arch Support Shoes are of special assistance in treating arch and ankle weakness of growing feet, and are as efficacious in preventing the foot troubles of childhood as in their treatment and correction.

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TREATISE on "FLAT-FOOT" MAILED UPON REQUEST

THE NEURASTHENIC INVALID.

Like the poor, the neurasthenic is "always with us," and while the stress and strain of modern life and living continue, the physician will be called upon to treat the more or less chronic invalid who exhibits all sorts of bizarre symptoms, in endless and kaleidoscopic variety. It is, of course, an easy matter to advise the physician to search out and remedy the operative cause of the disorder, but it is not always as easy to do this, especially when no organic changes are discoverable. While purely symptomatic treatment may be unscientific, it is usually essential, in order to gain and retain the confidence of the patient. There is, however, one pathologic finding in a large majority of cases, and that is anemia of greater or lesser degree. In some instances this may be found to be the essential cause of the neurotic symptoms. In any event, this condition should be corrected, and for such purpose there is no better remedy than Pepto-Mangan (Gude). When a hematinic is indicated for a nervous, cranky man, or a finicky, more or less hysterical woman, Pepto-Mangan is peculiarly serviceable, as the patient cannot consistently object to the taste, which is agreeable to every one. The digestion is not interfered with in the least, constipation is not induced, and the blood-constructing effect of the remedy is prompt and certain. It is always worthy of trial not only in the anemia of the neurasthenic invalid, but also in all conditions of blood and tissue devitalization.

WHEN YOU HEAR ABOUT "TWILIGHT SLEEP", THINK ABOUT H-M-C (ABBOTT).

Two lay magazines, with a combined circulation of more than two million copies, are conducting one of the most aggressive campaigns of publicity ever undertaken in this country. These periodicals have got hold of the fact that it is possible to make childbirth painless, through the use of scopolamine (hyoscine) and morphine, and they are spreading this knowledge broadcast. Within six months there will not be an intelligent woman in America who doesn't know about this method. When these women learn that it really is possible to escape the terrible pangs of labor, and that you can help them to take advantage of it in their homes, they will be clamoring at your door for the "twilight sleep" when the time approaches for the baby to come.

"What is this wonder-working thing, this Twilight Sleep?" asks the Ladies' World; and it answers, "Nothing in the world but the skillful use of anesthetics to produce that very fine balance between the states of consciousness and unconsciousness, where the patient cannot recollect immediate sensations, such as pain, yet is in full possession of her muscular power and her will to help. These are the ideal conditions for a safe, normal, painless birth. They have been obtained by the great physicians of Germany. They can be obtained by the equally skillful doctors of America. They can be obtained in your town and mine, in the childless home of that terrified young husband, in your home and your daughter's home—everywhere."

All that can be accomplished with scopolamine and morphine, at Freiburg or elsewhere, can be accomplished—is being accomplished in thousands of cases—with H-M-C (Abbott).

The "twilight sleep" is available for you in your town in your practice. In H-M-C (Abbott) are provided the necessary drugs, in proper combination, to meet most obstetrical conditions. The exact method of using it is described in a little booklet, which (with prices) The Abbott Alkaloidal Company, Ravenswood, Chicago, will send on request.

Better order your supply of H-M-C at once. You may have a case requiring its use this very day. Drug prices are soaring, and the price of H-M-C, already advanced under stress of the European war, may be higher at any time.

Feeding In Typhoid

The seat of the lesions of typhoid fever is also the seat of the organs which select, digest and assimilate food.

The inflamed intestinal tract, with its swollen glands and accompanying perversion of function, is in no condition to do but little more than fight the bacterial invasion which is the prime cause of the trouble.

Digestive and assimilative processes have become weakened, as a natural consequence of the inflammatory state of the intestinal mucous membrane; body waste is taking the place of equal and compensatory replenishment of cells—emaciation naturally following.

Yet the host—the patient—must be kept alive, if possible, until the conflict is past, and his forces are reestablished. It is here that food—easily digestible, nutritious, unirritating food—is of such insistent importance. It is here that many discriminating physicians have found

Grape-Nuts

to be a delicious and most efficacious, convenient, and specially adapted food (with cream or milk, hot or cold, as directed by the doctor) in the adjunct, or dietetic treatment of typhoid fever.

"There's a Reason"

The ***Clinical Record,*** for Physician's bedside use, together with samples of **Grape-Nuts, Instant Postum** and **Post Toasties** for personal and clinical examination, will be sent on request to any Physician who has not yet received them.

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